

FIG. 1C-1

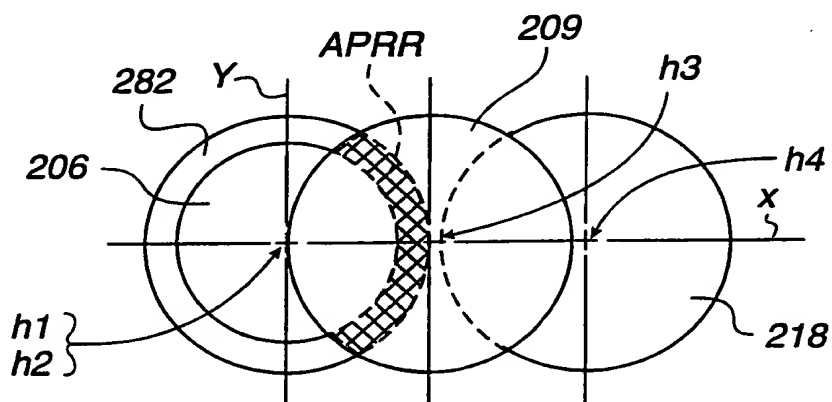


FIG. 1C-2

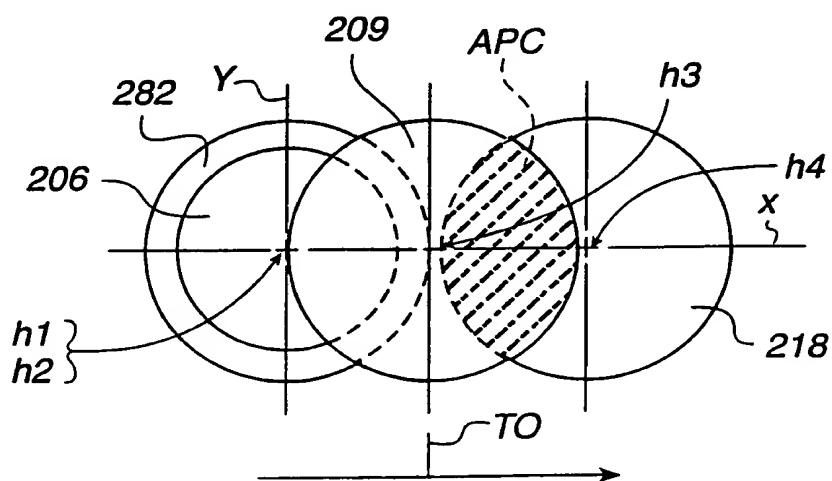


FIG. 1C-3

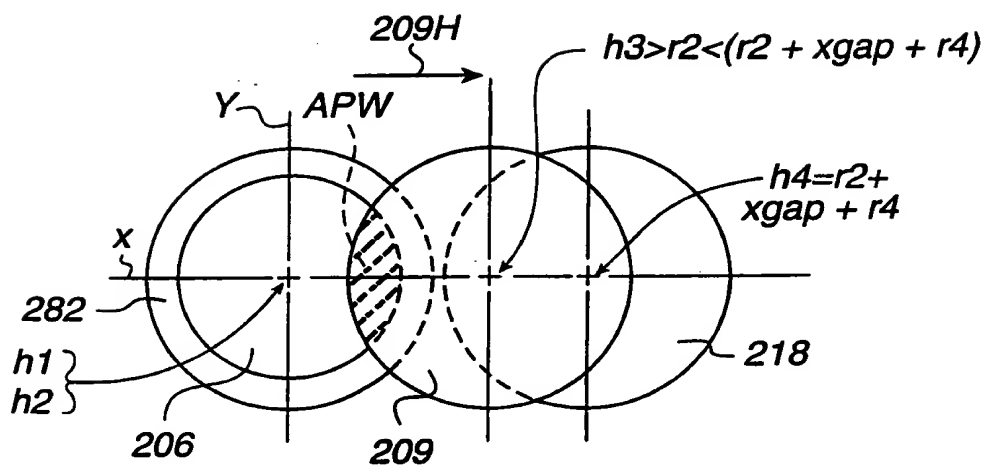


FIG. 1D-1

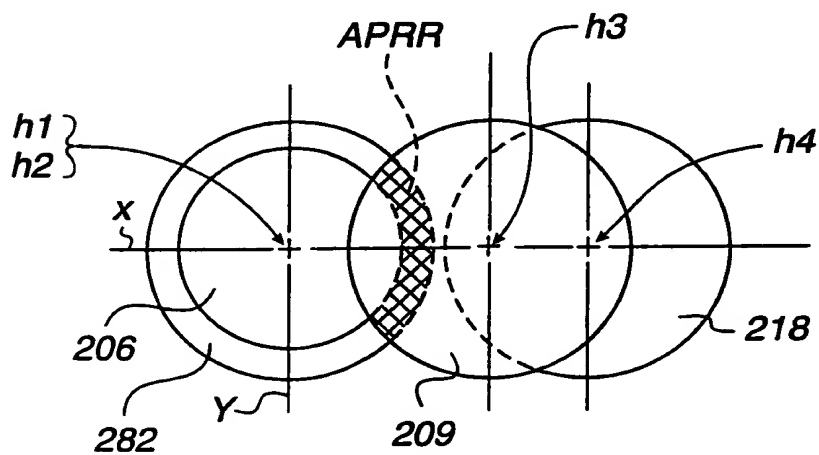


FIG. 1D-2

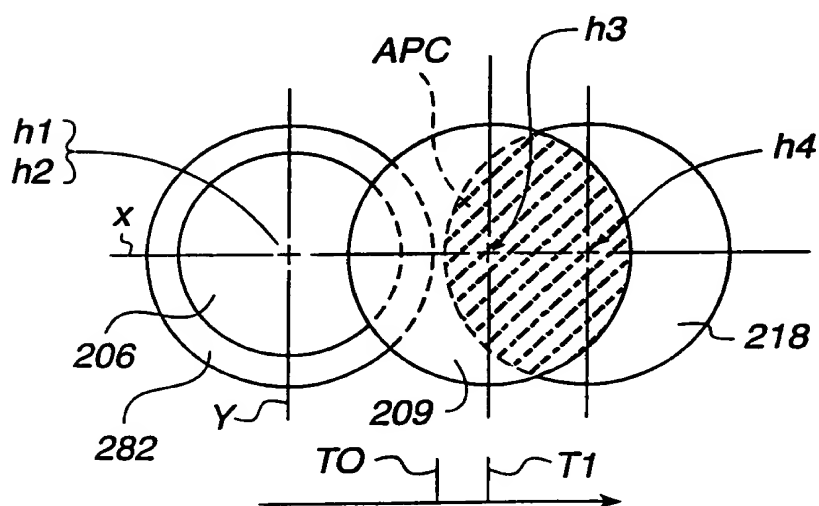


FIG. 1D-3

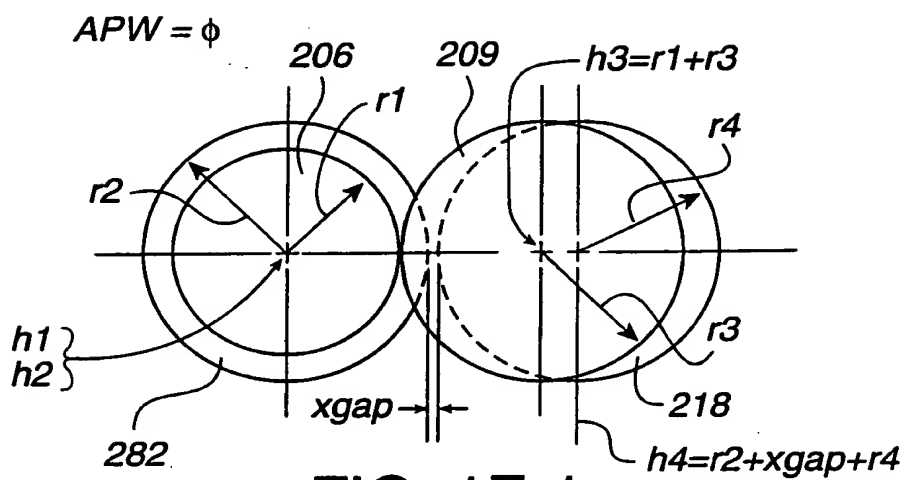


FIG. 1E-1

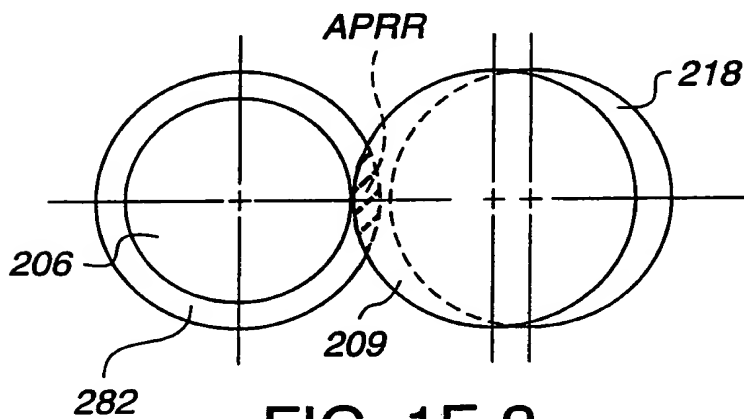


FIG. 1E-2

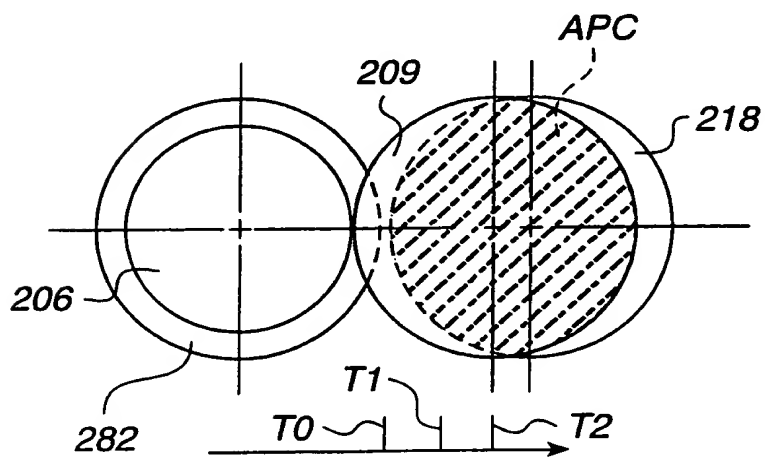


FIG. 1E-3

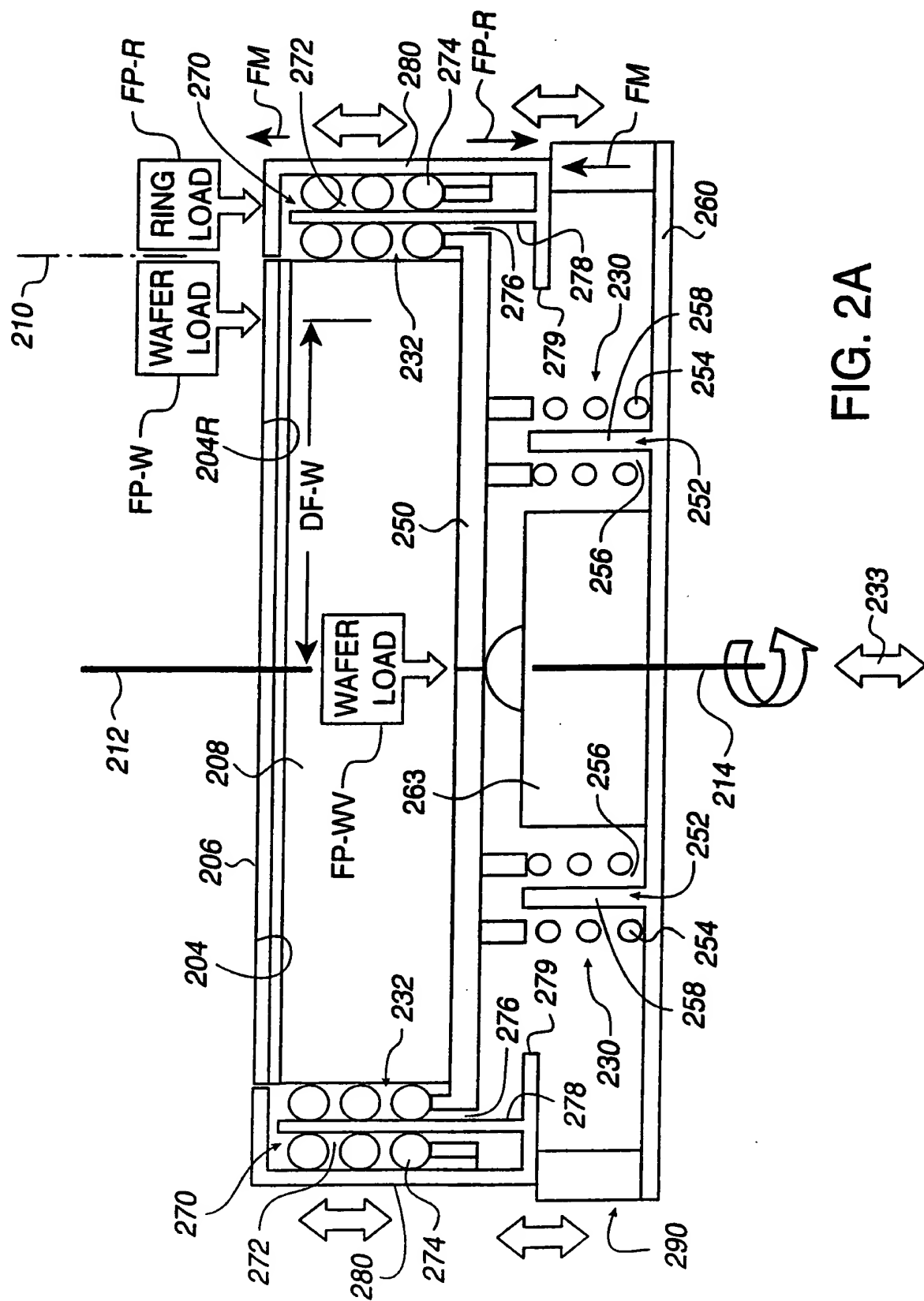
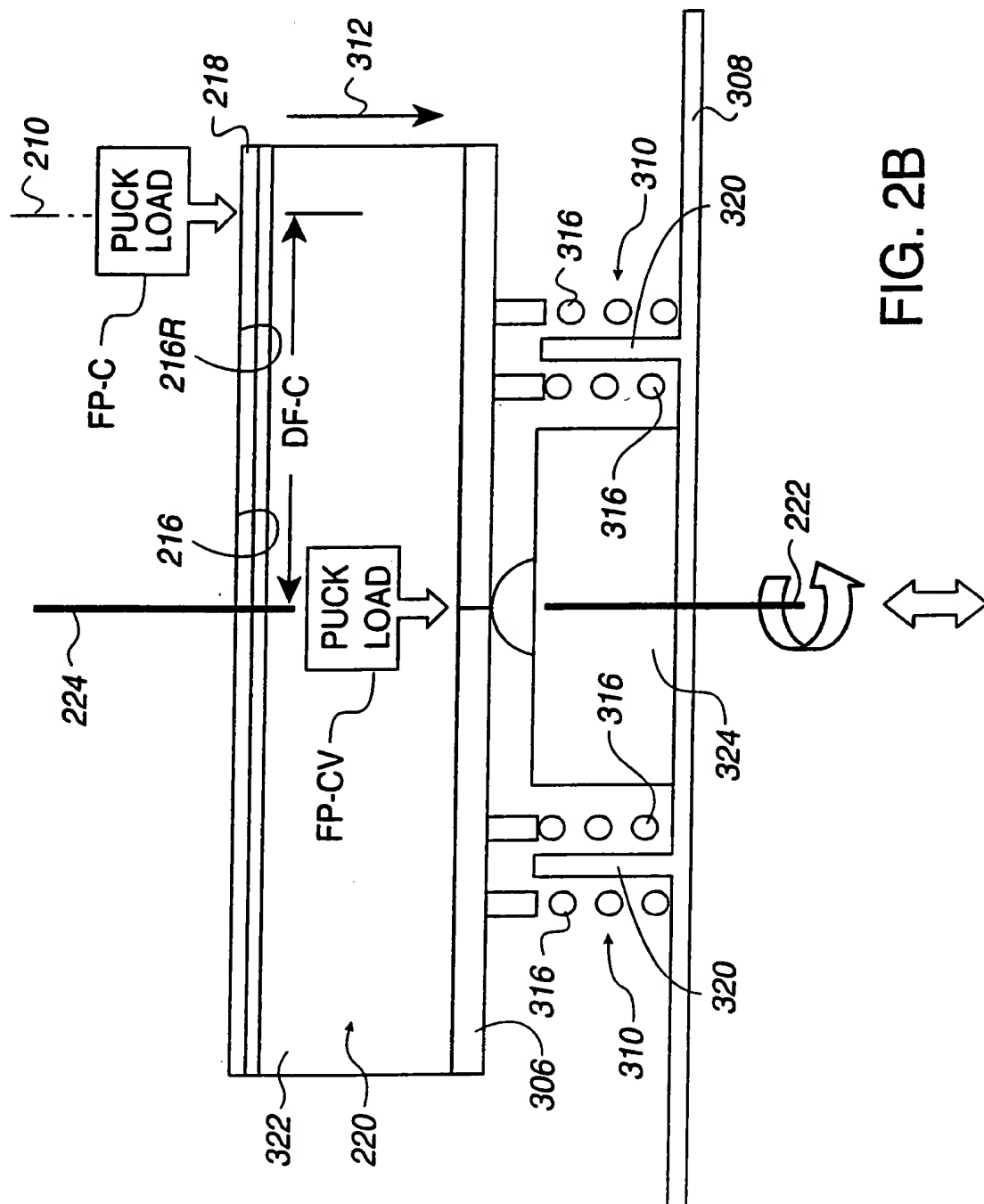


FIG. 2A



**FIG. 2B**



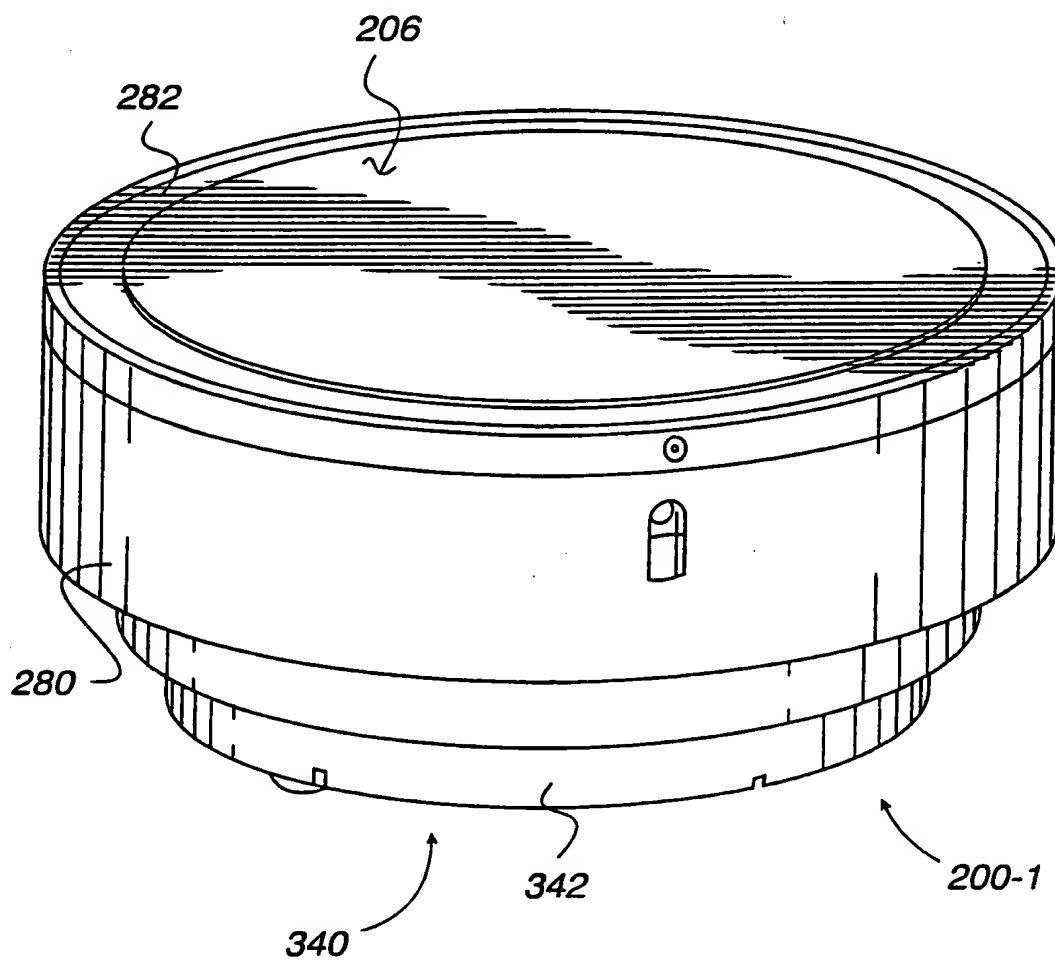


FIG. 3B



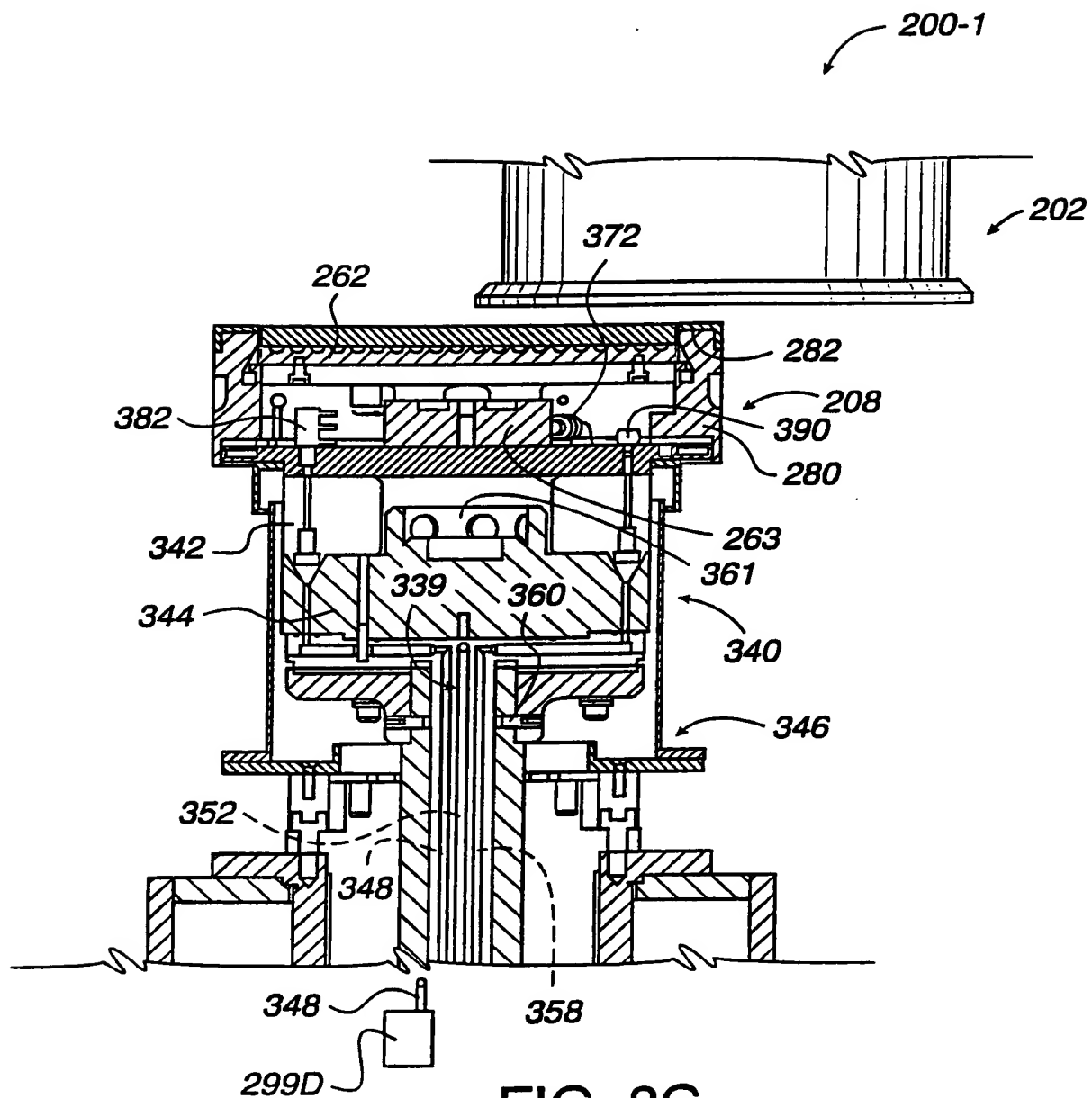


FIG. 3C

FIG. 4A

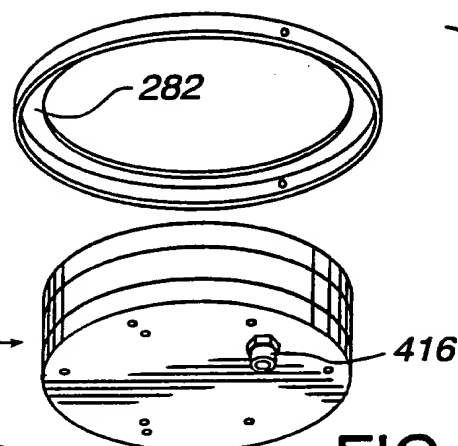
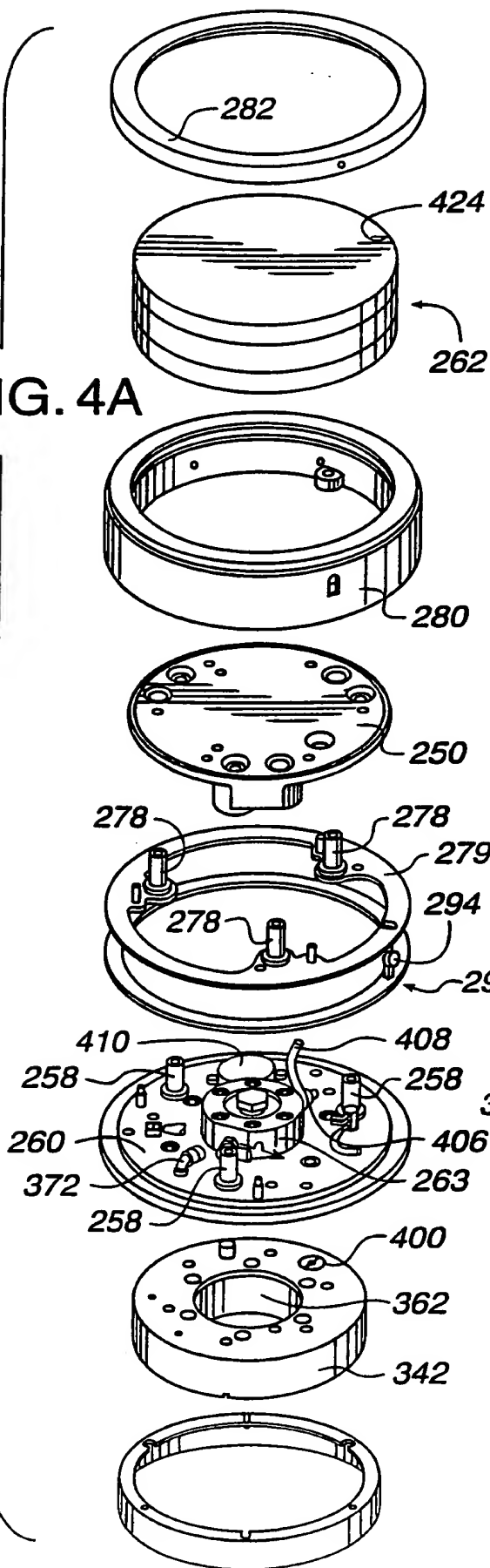
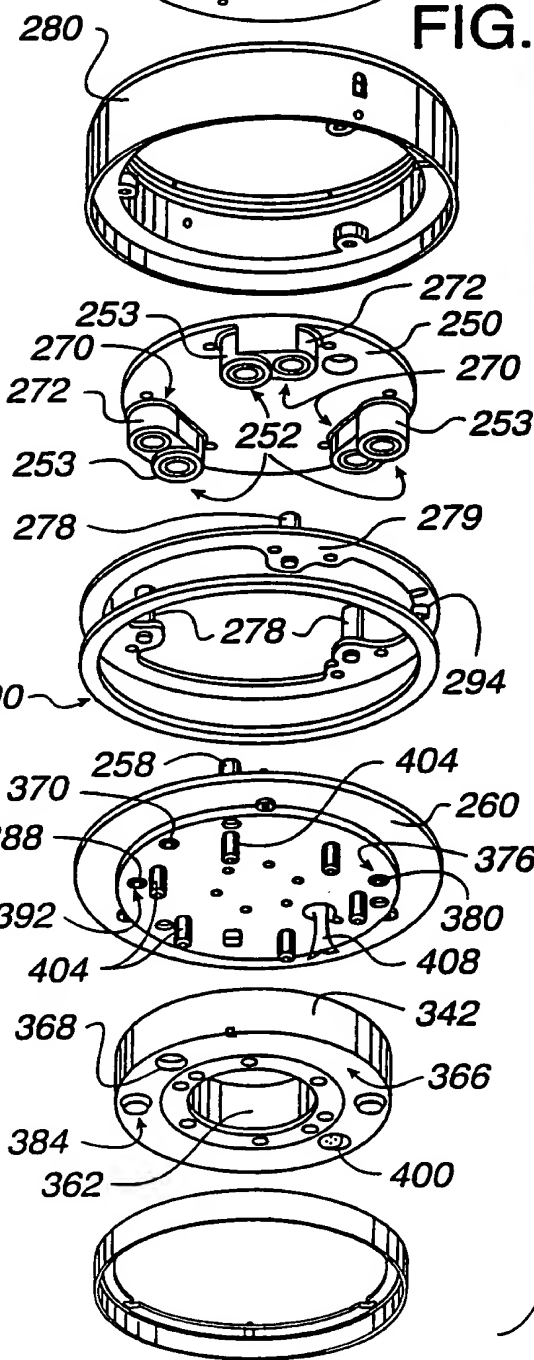


FIG. 4B



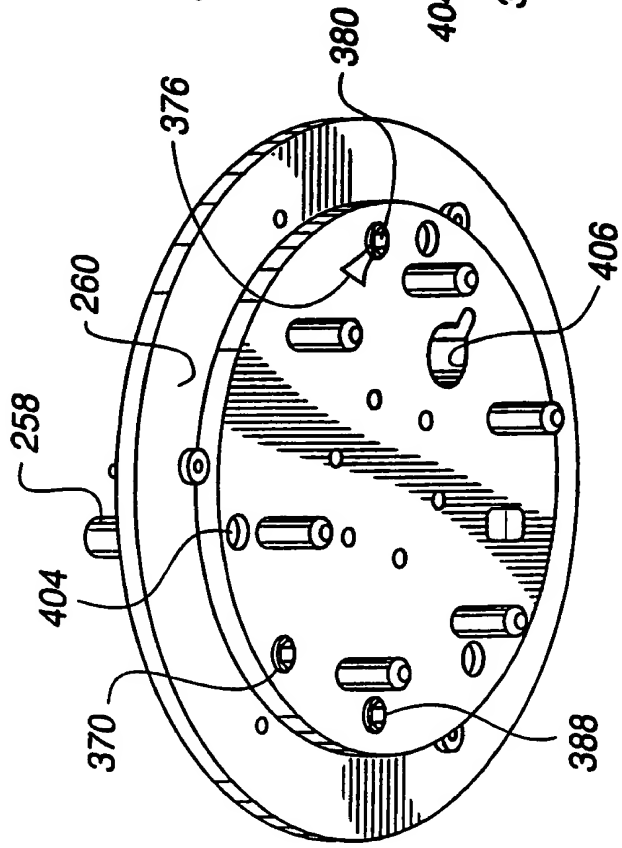


FIG. 5A-1

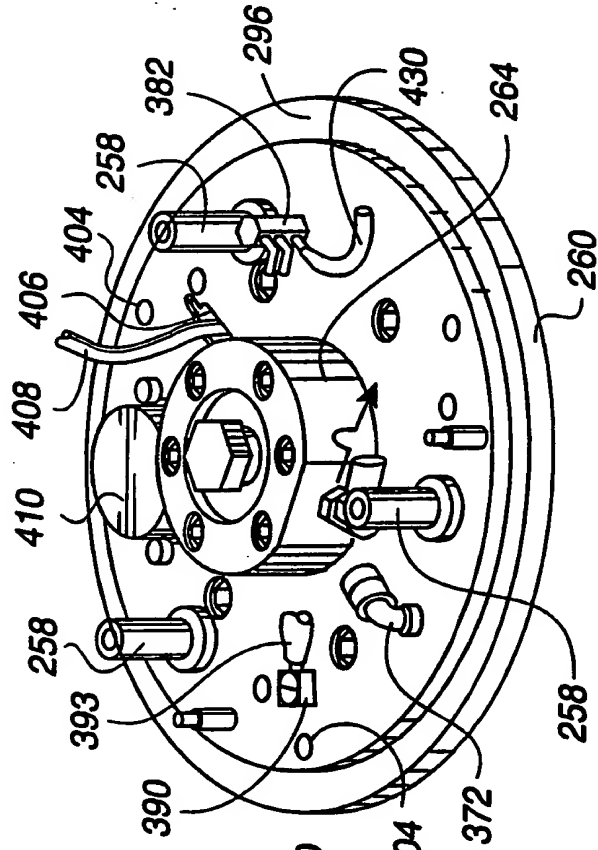


FIG. 5B-1

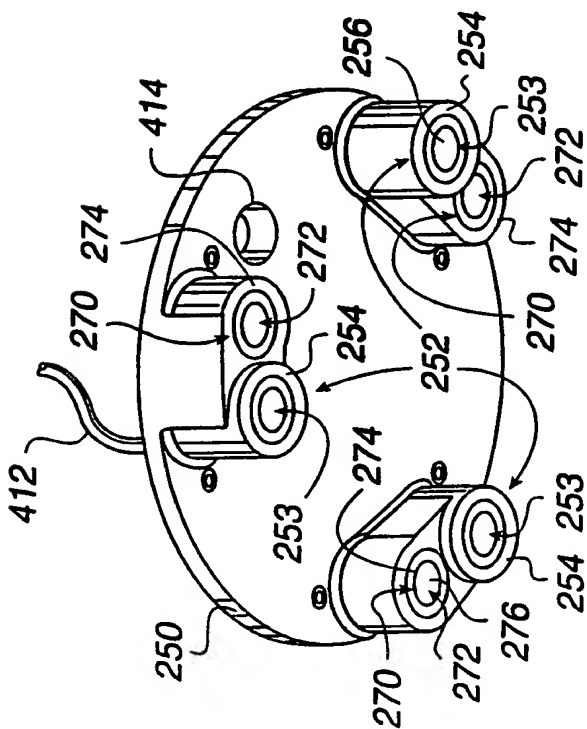


FIG. 5A-2

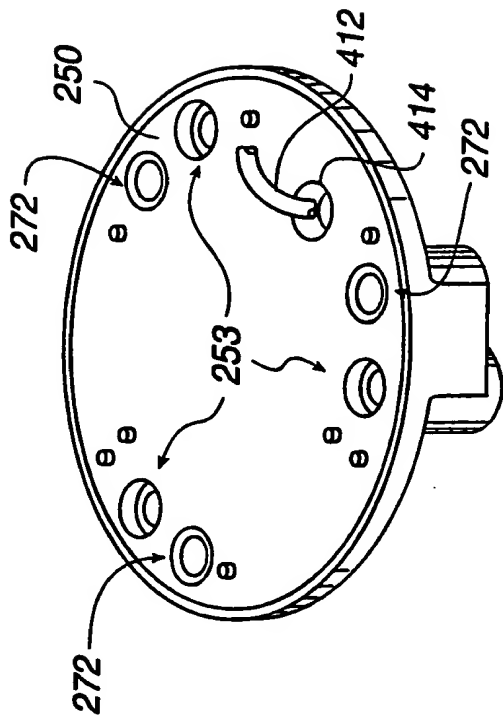


FIG. 5B-2

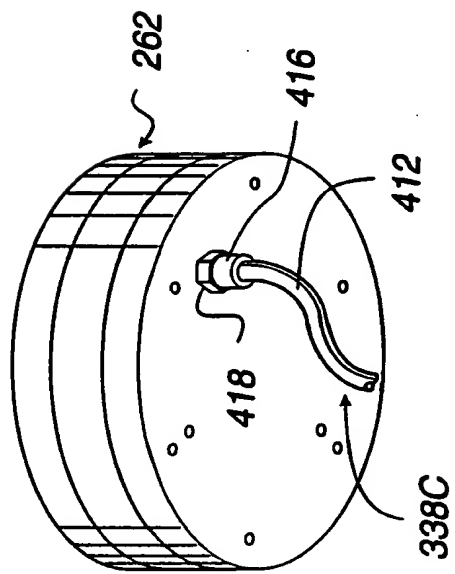


FIG. 5A-3

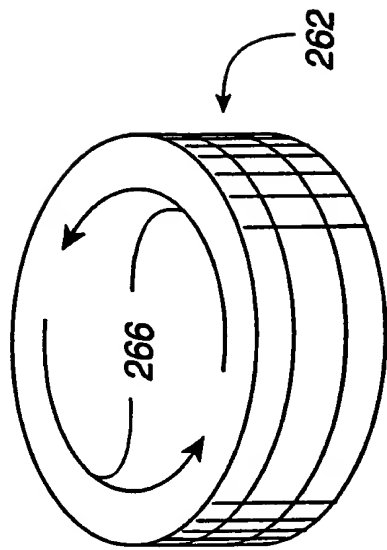


FIG. 5B-3

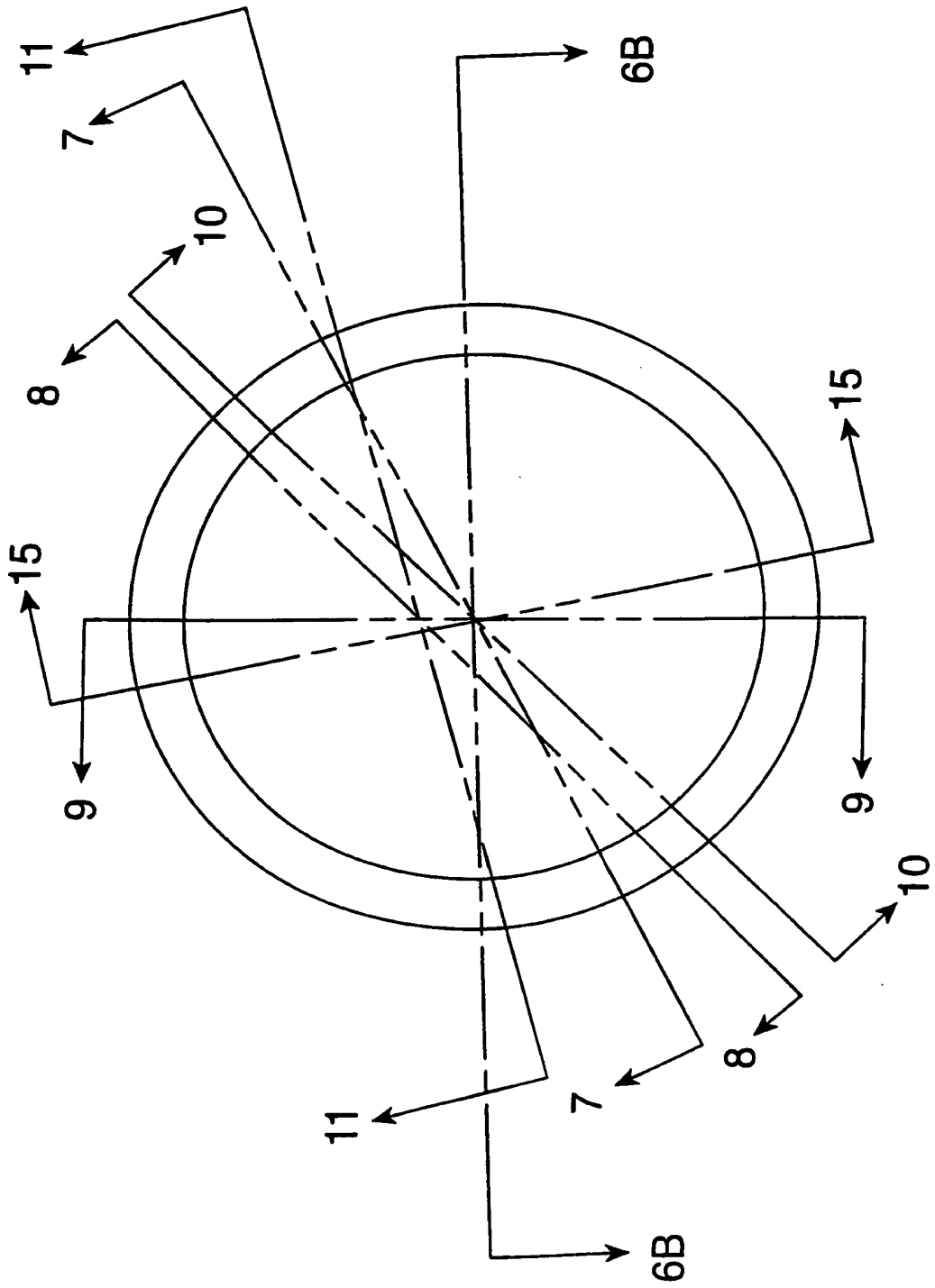
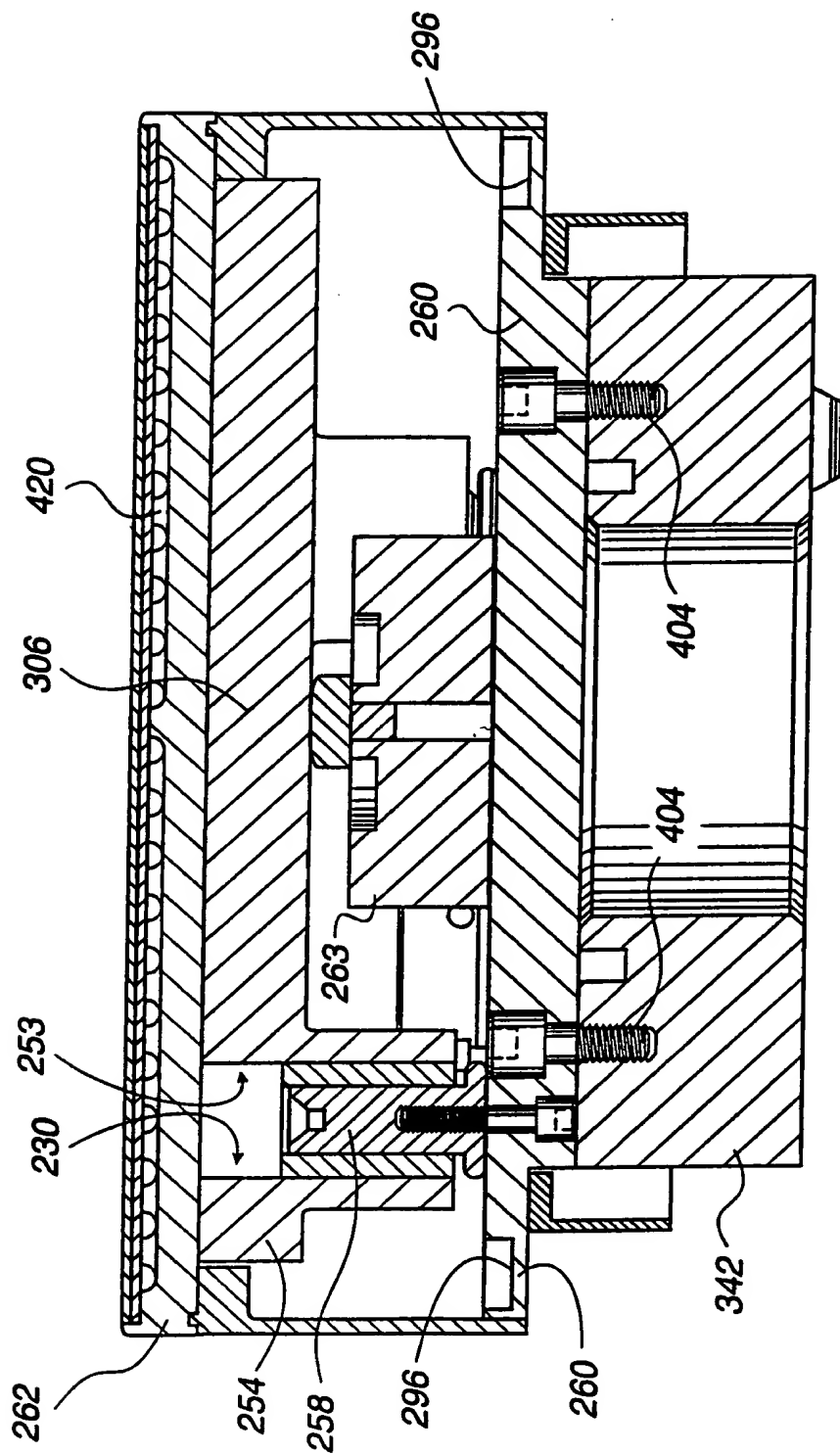


FIG. 6A



**FIG. 6B**

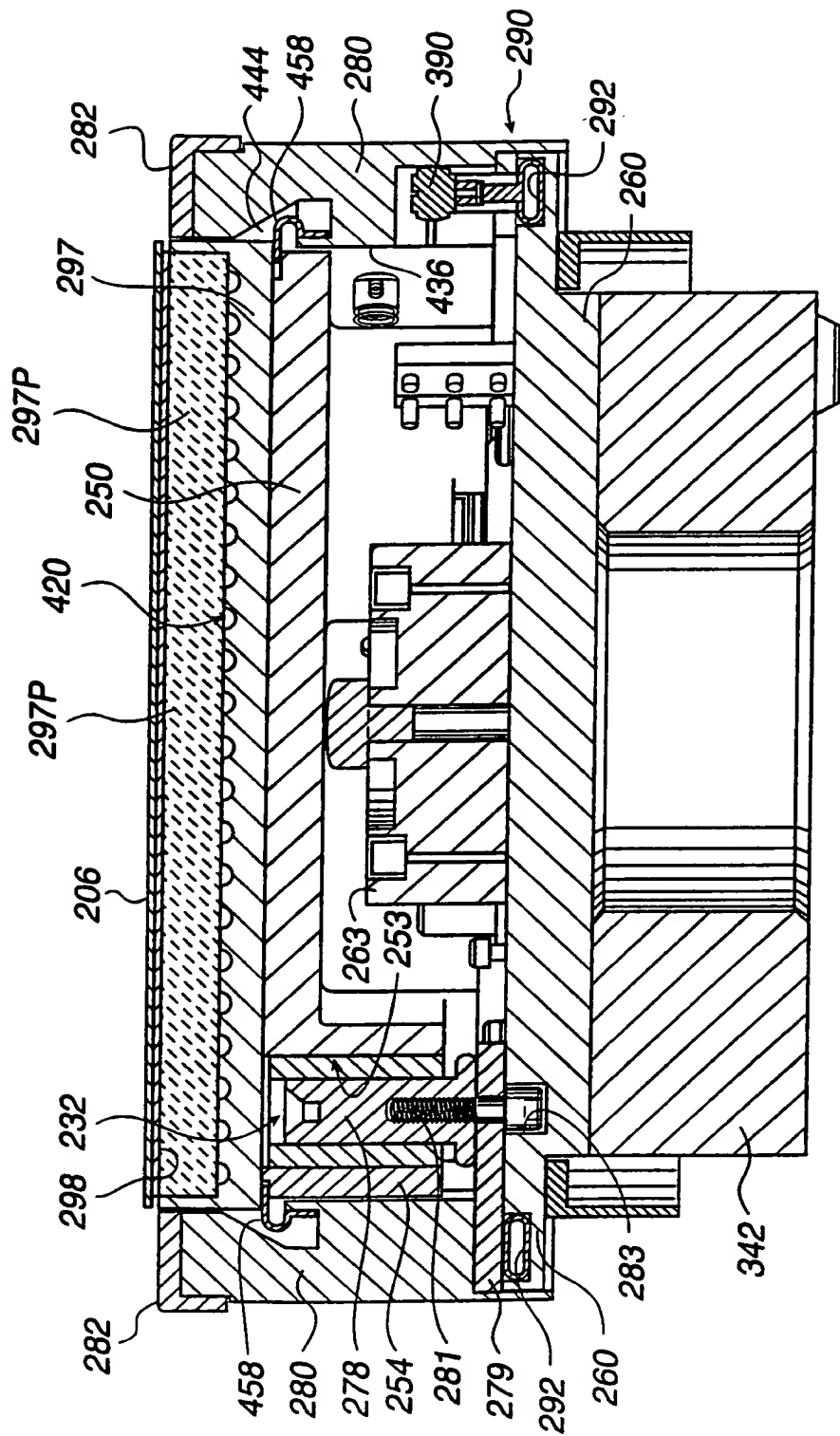


FIG. 7





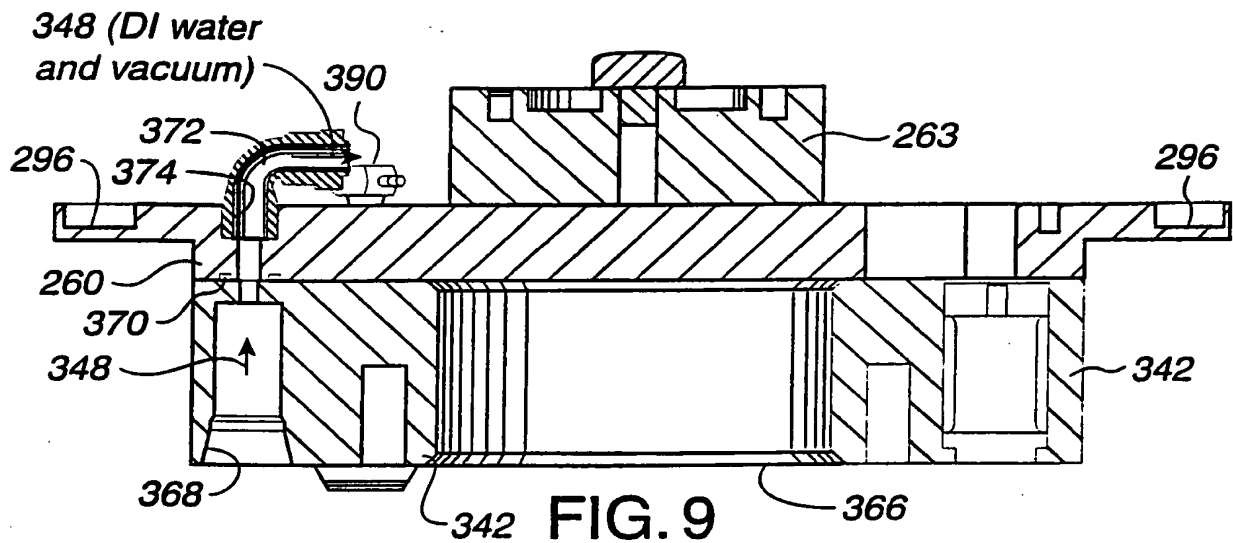


FIG. 9

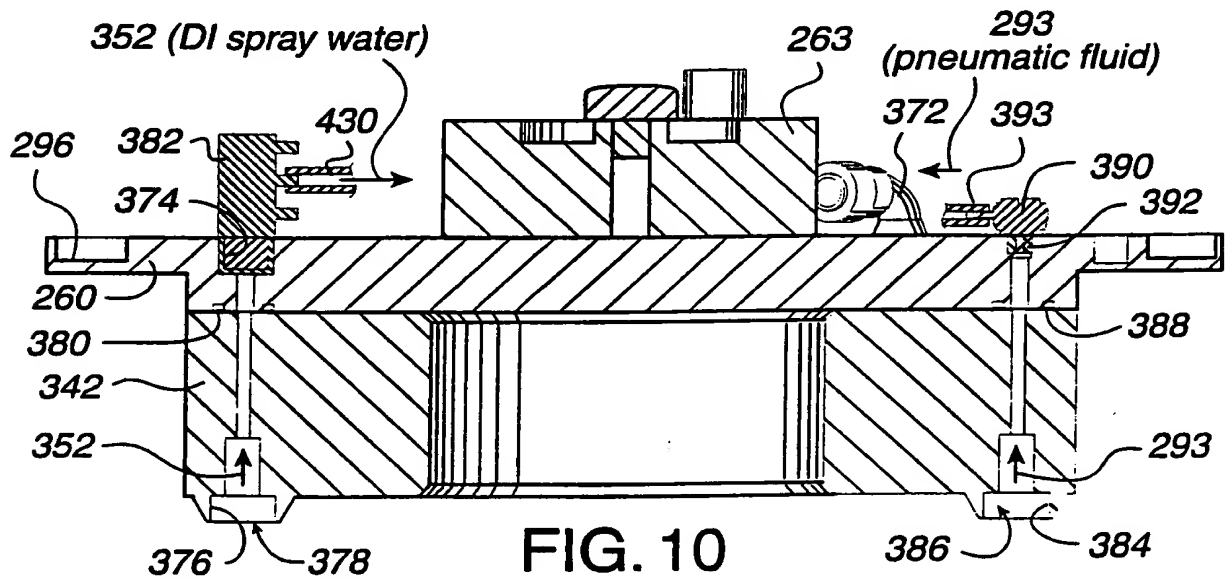


FIG. 10

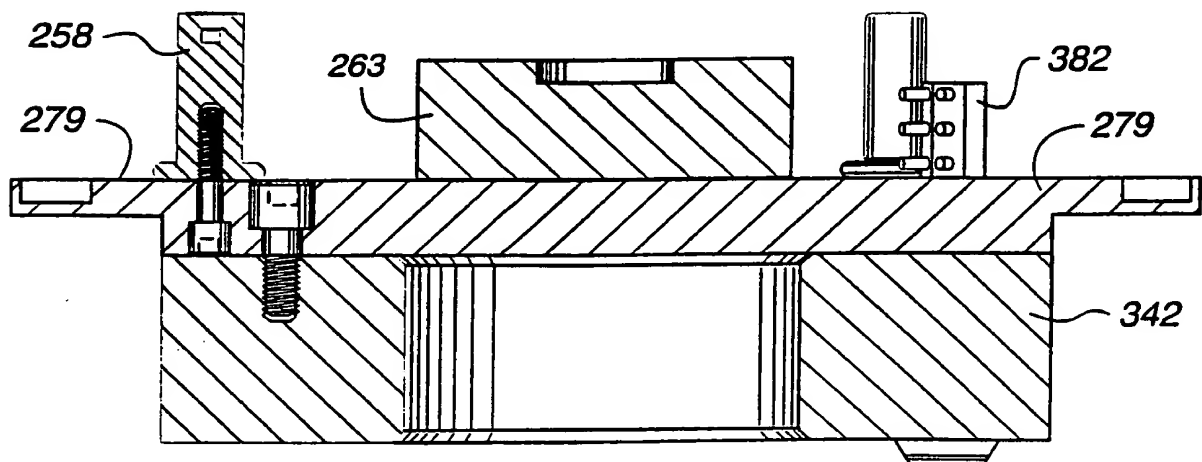
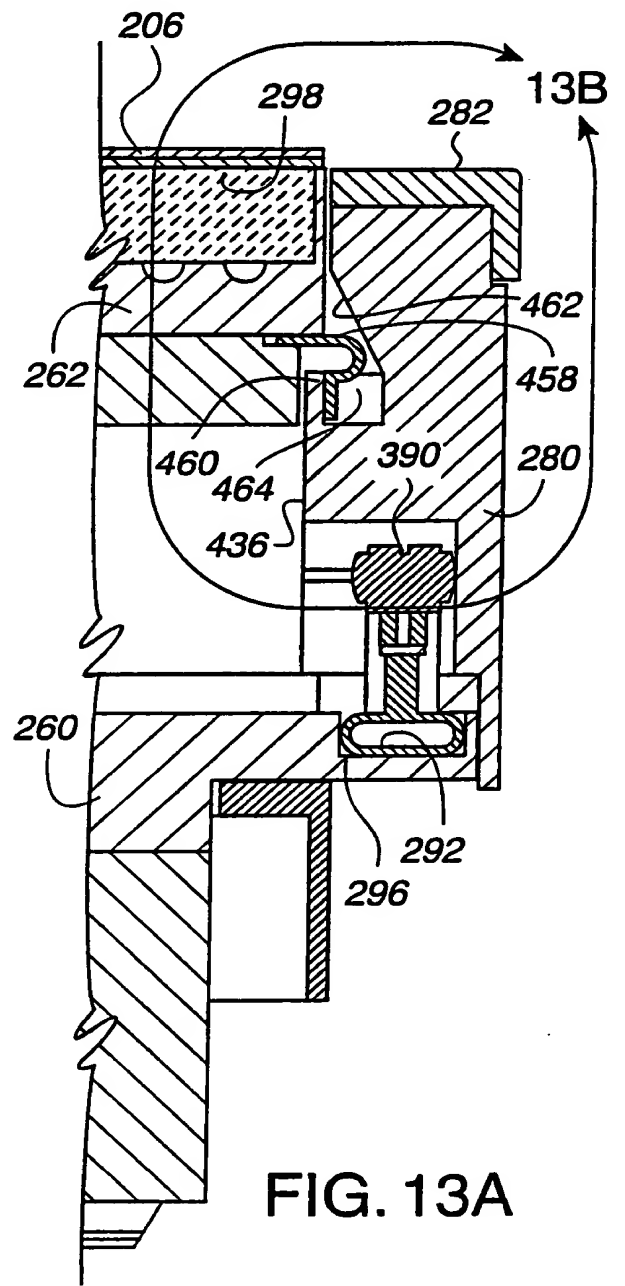
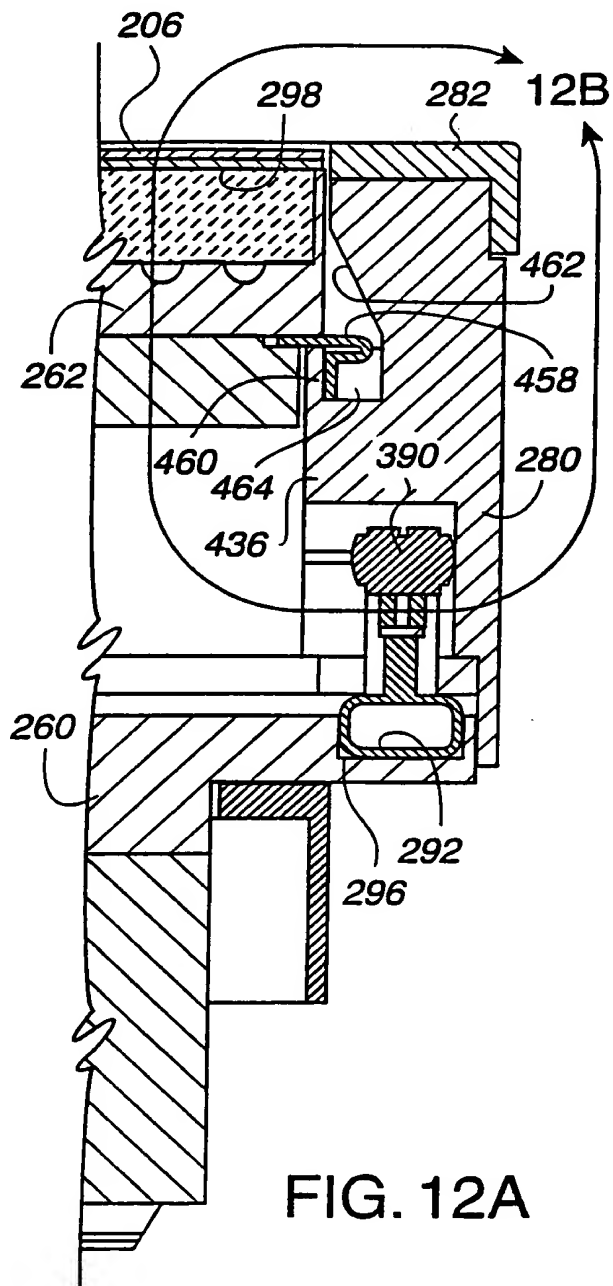


FIG. 11



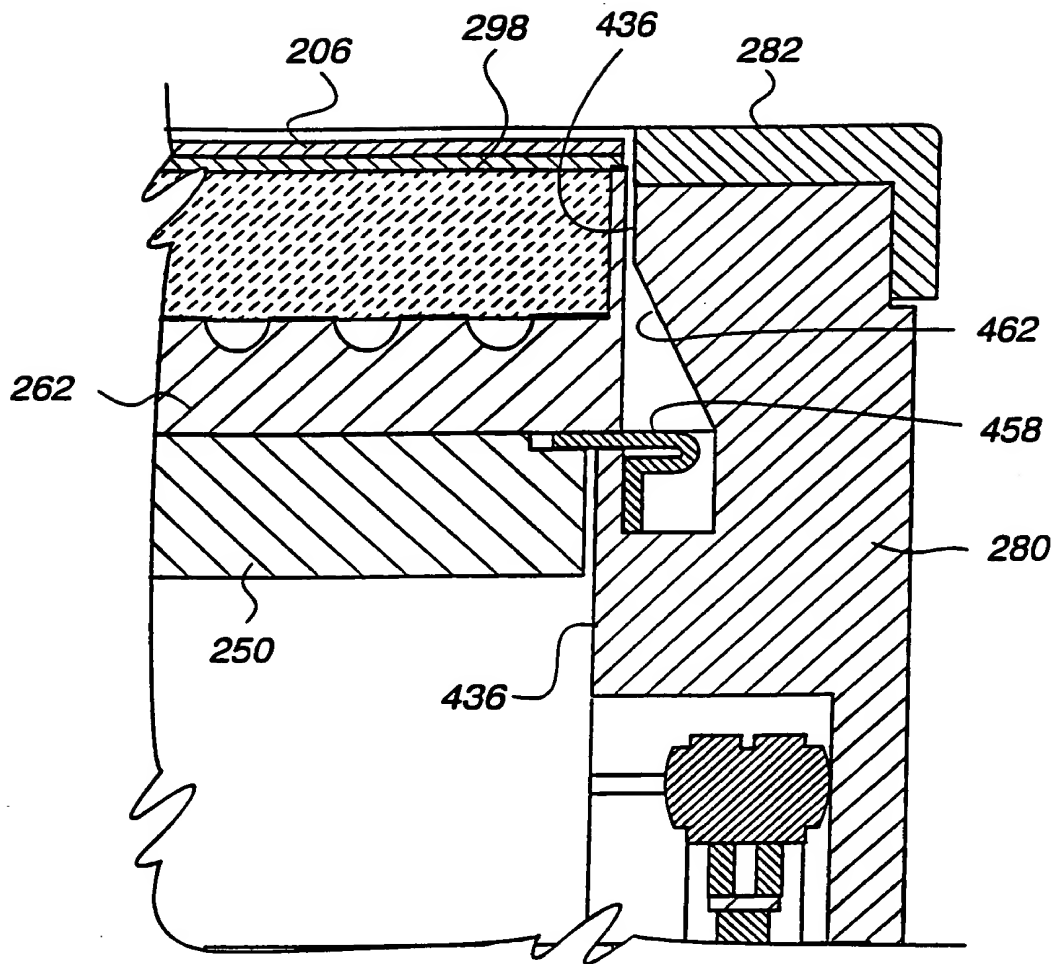


FIG. 12B

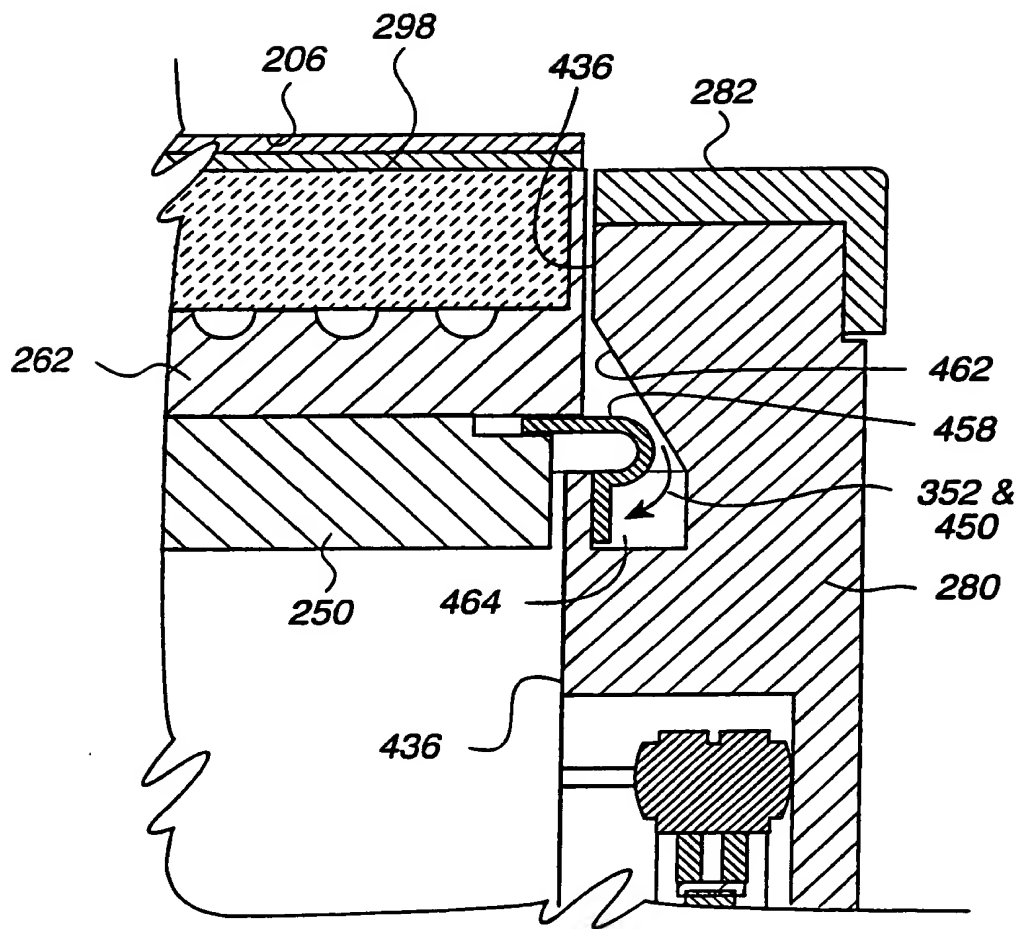
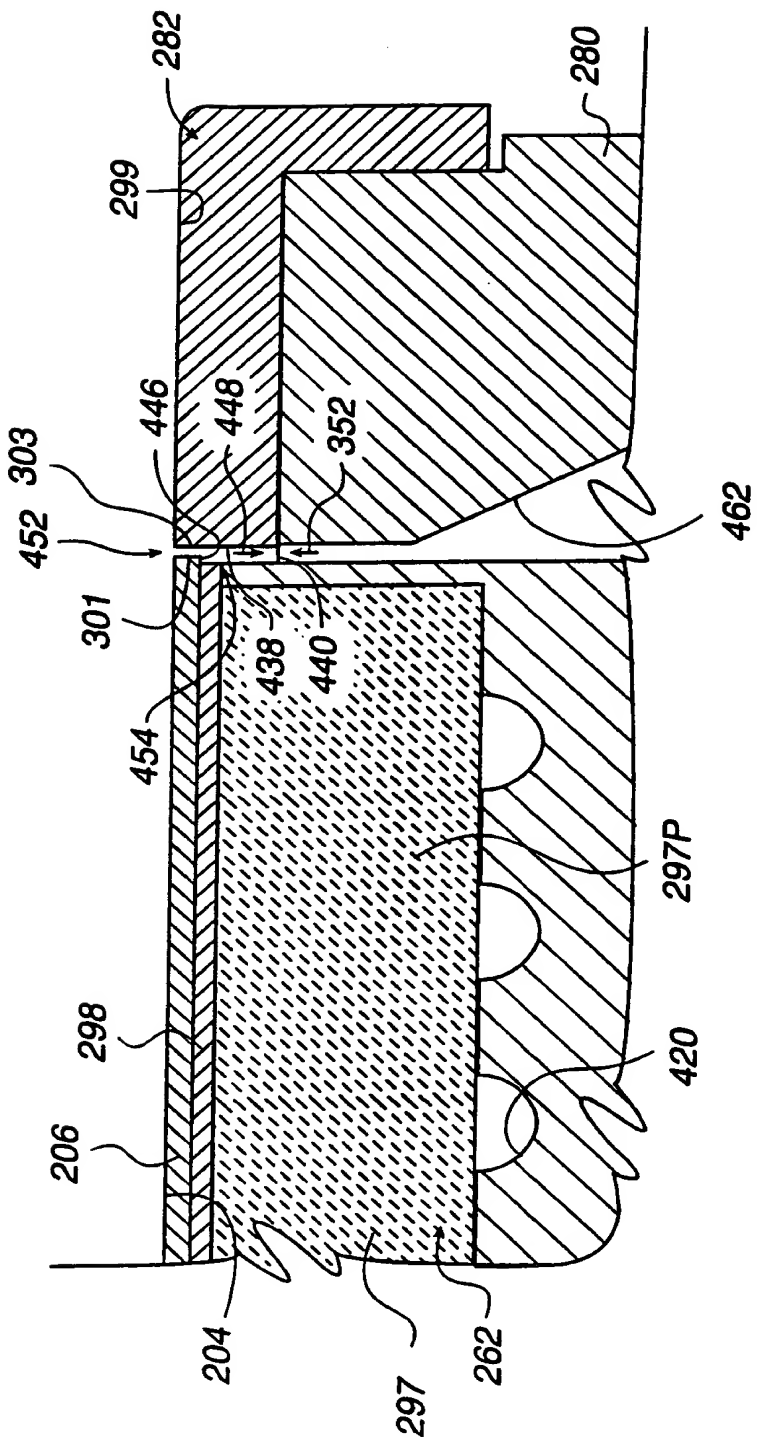


FIG. 13B





**FIG. 14B**

FIG. 15 is a cross-sectional view of the device in a closed position, showing the internal components and the sealing mechanism. The device includes a housing 206, a piston 262, a valve 260, and a spring 285. The piston 262 is in contact with the valve 260, which is held in a closed position by the spring 285. The housing 206 includes a flange 282 and a seal 289. The piston 262 includes a seal 298 and a flange 422. The valve 260 includes a seal 263 and a flange 250. The spring 285 is located between the valve 260 and the housing 206. The device is shown in a closed position, with the piston 262 blocking the flow of fluid through the valve 260.

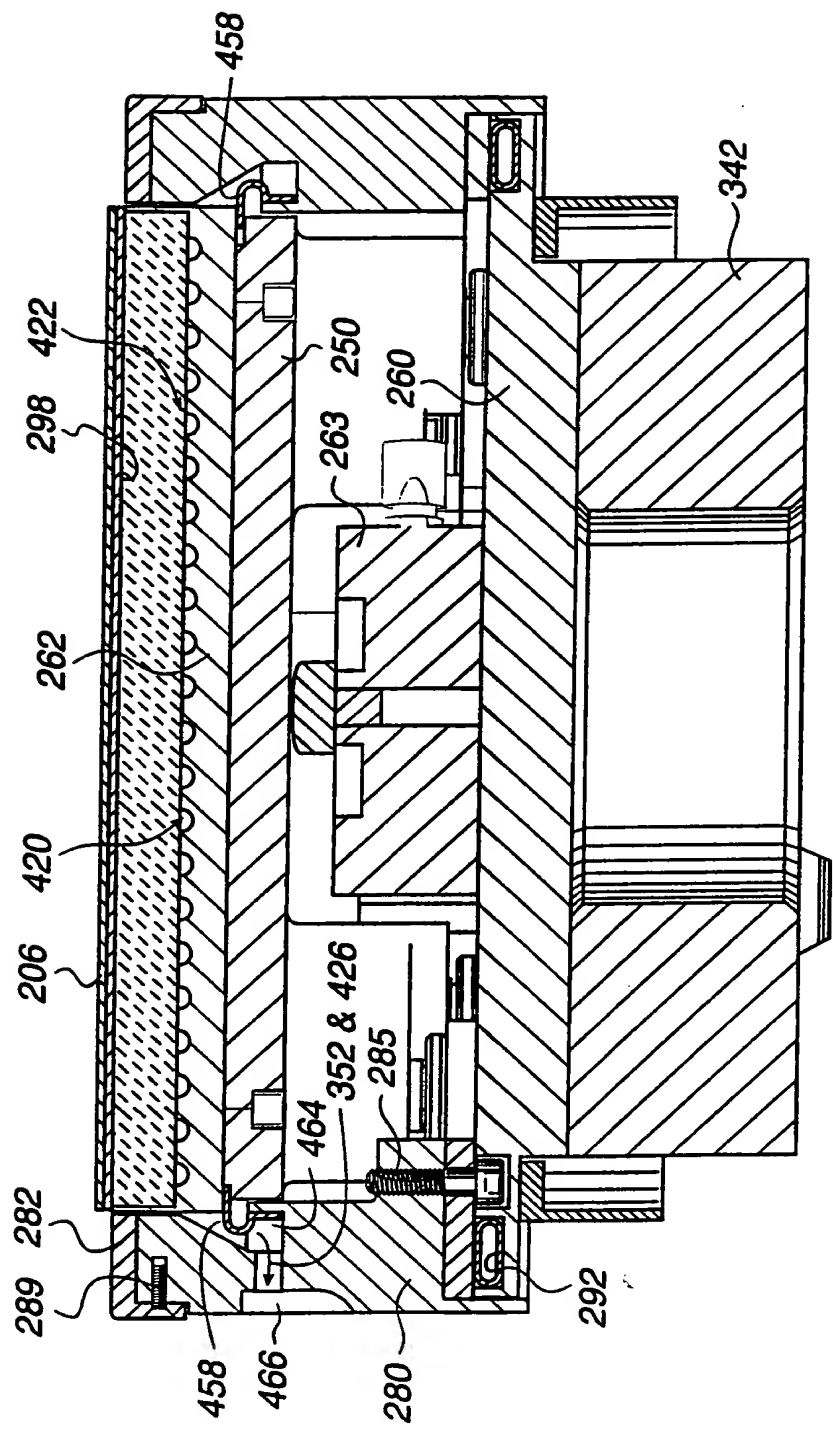
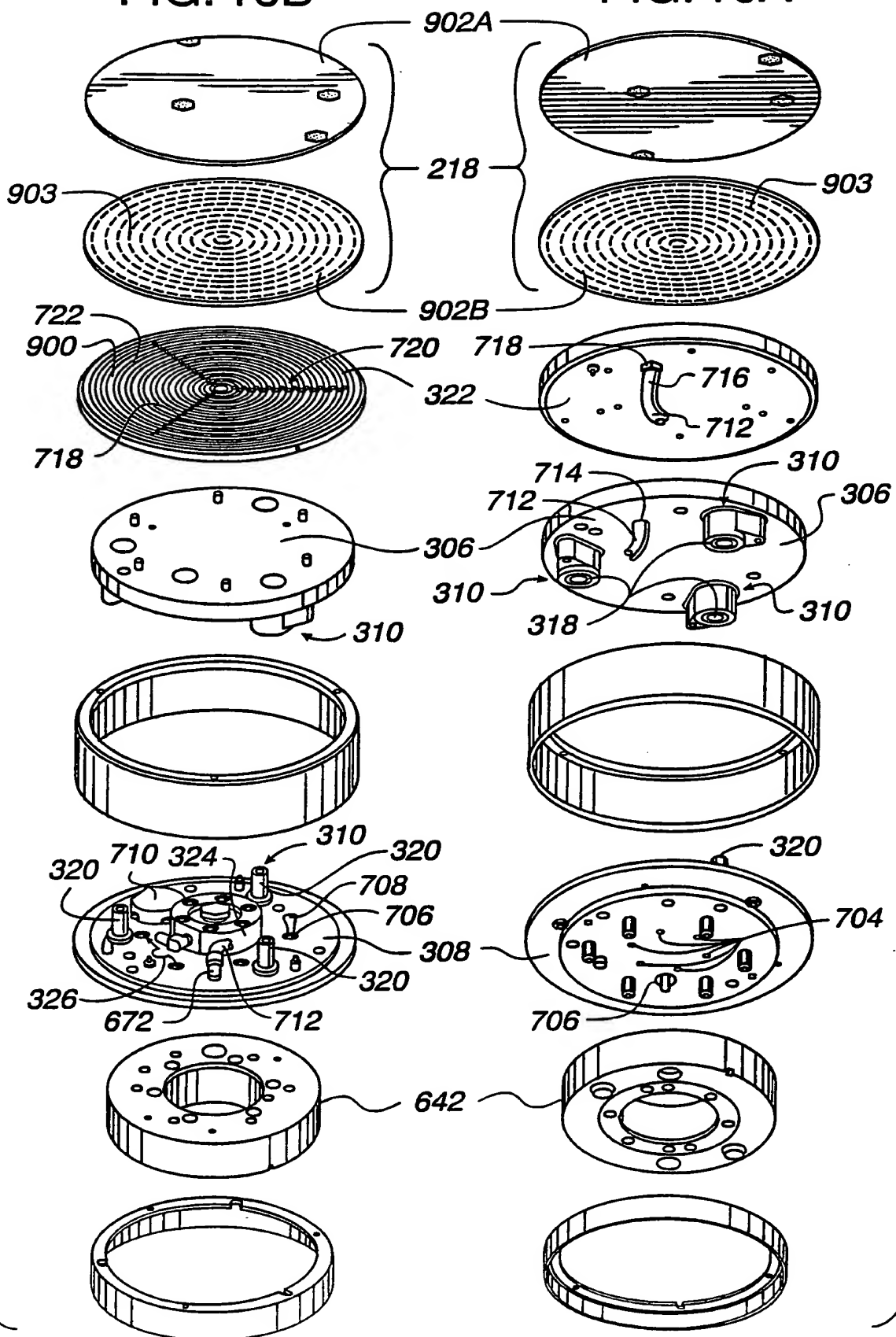


FIG. 15



FIG. 16B

FIG. 16A



200-1

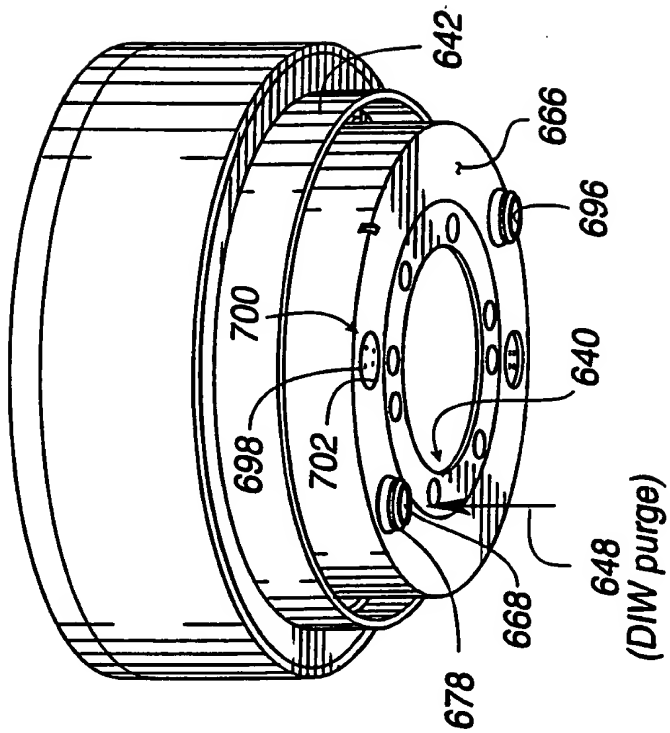


FIG. 17B

FIG. 17A

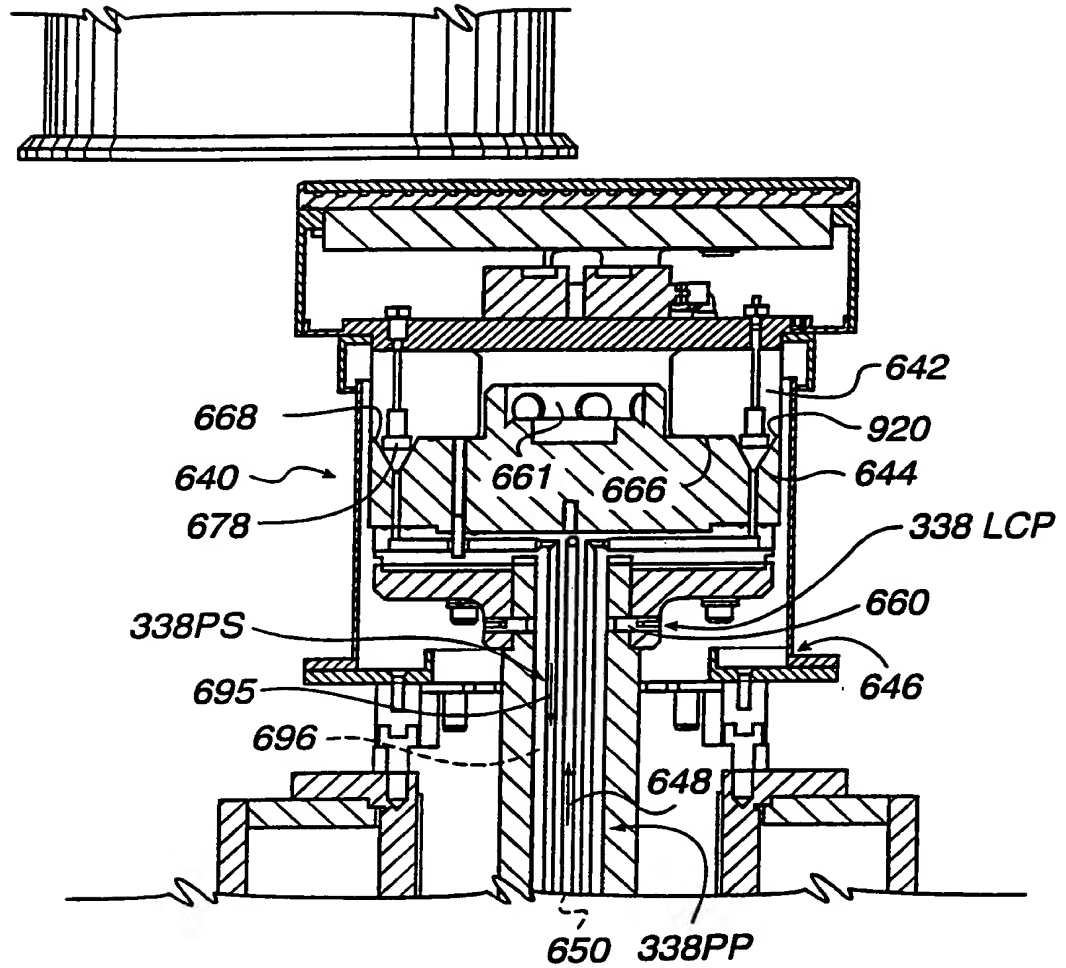


FIG. 17C

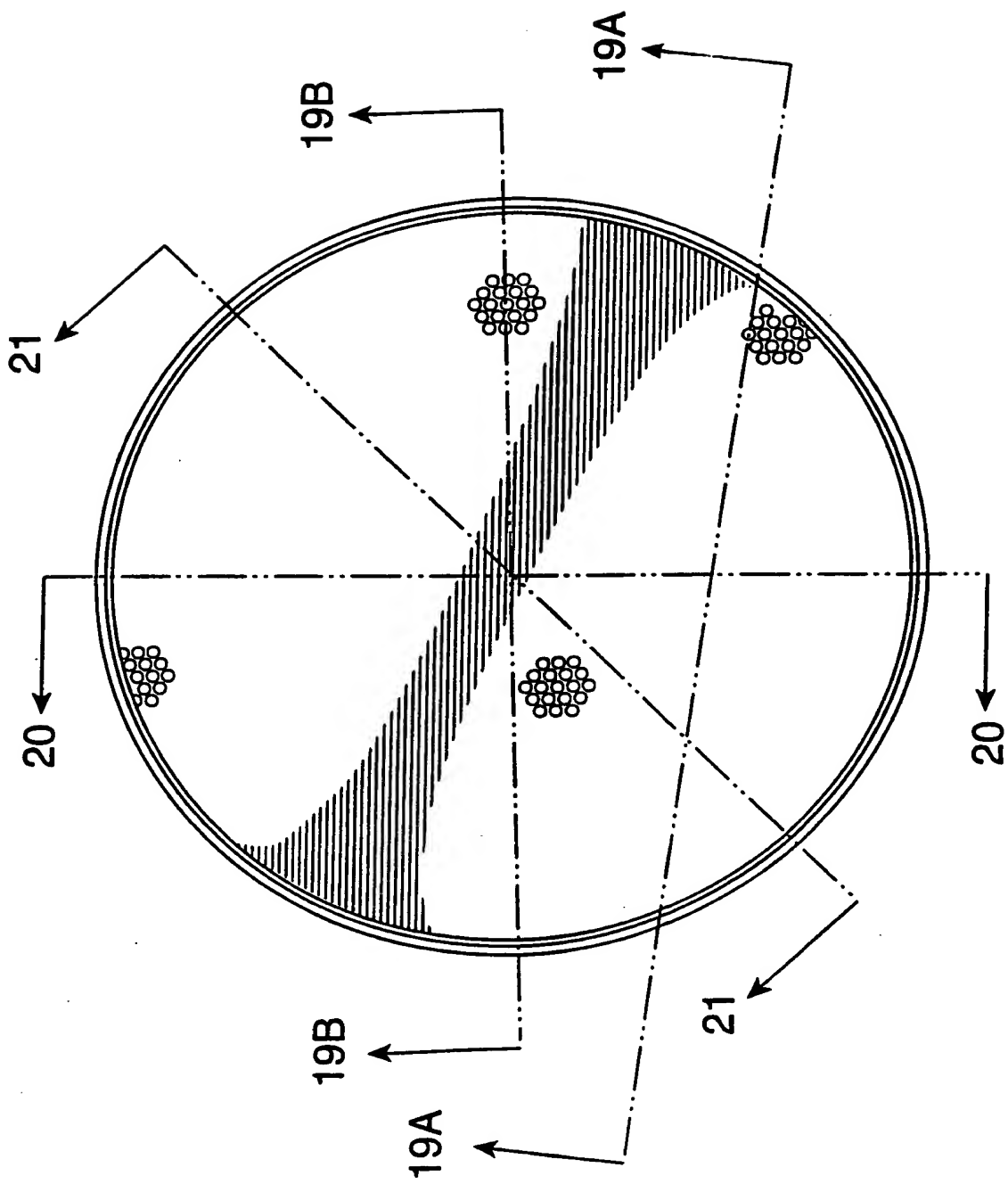


FIG. 18

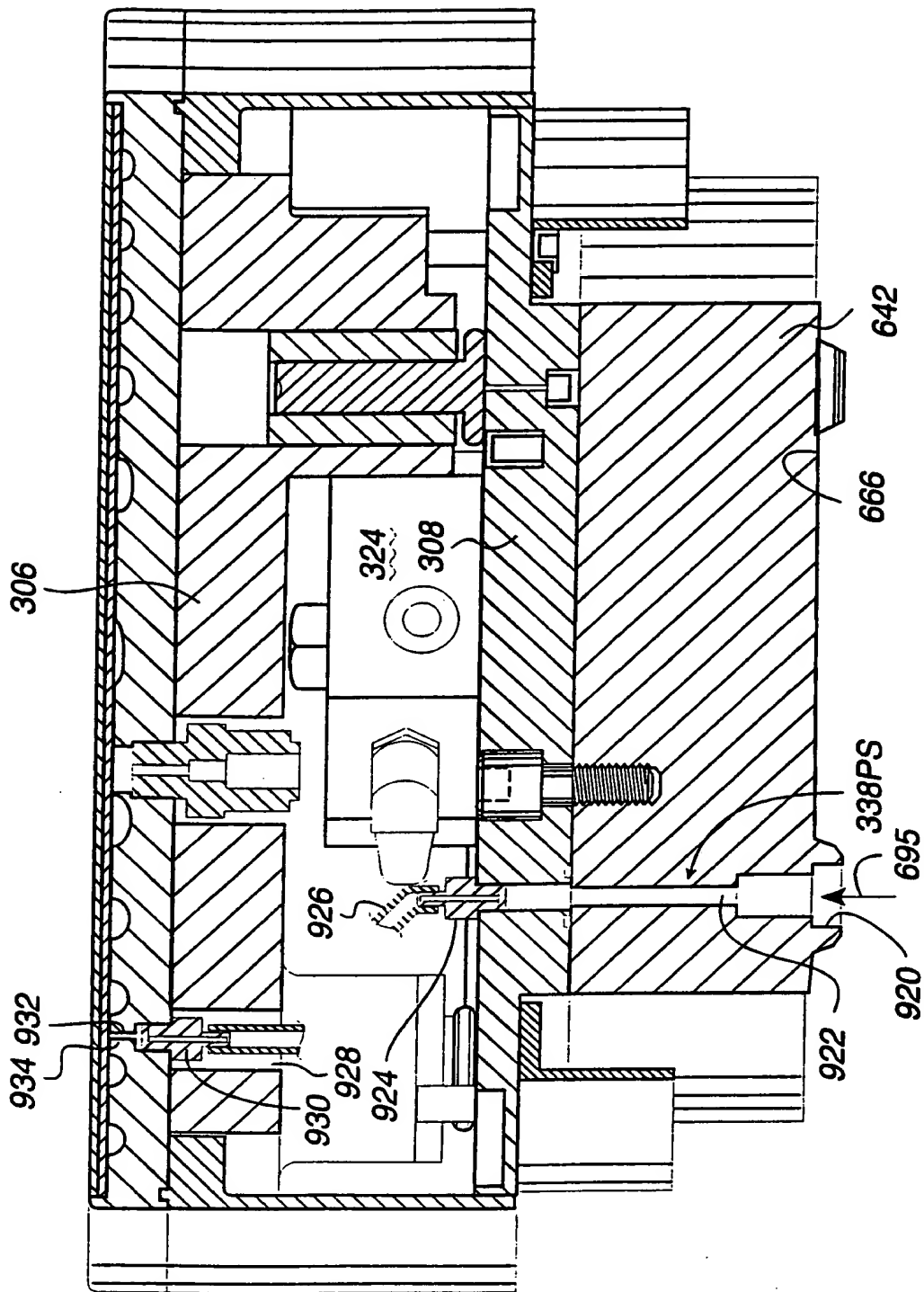


FIG. 19A

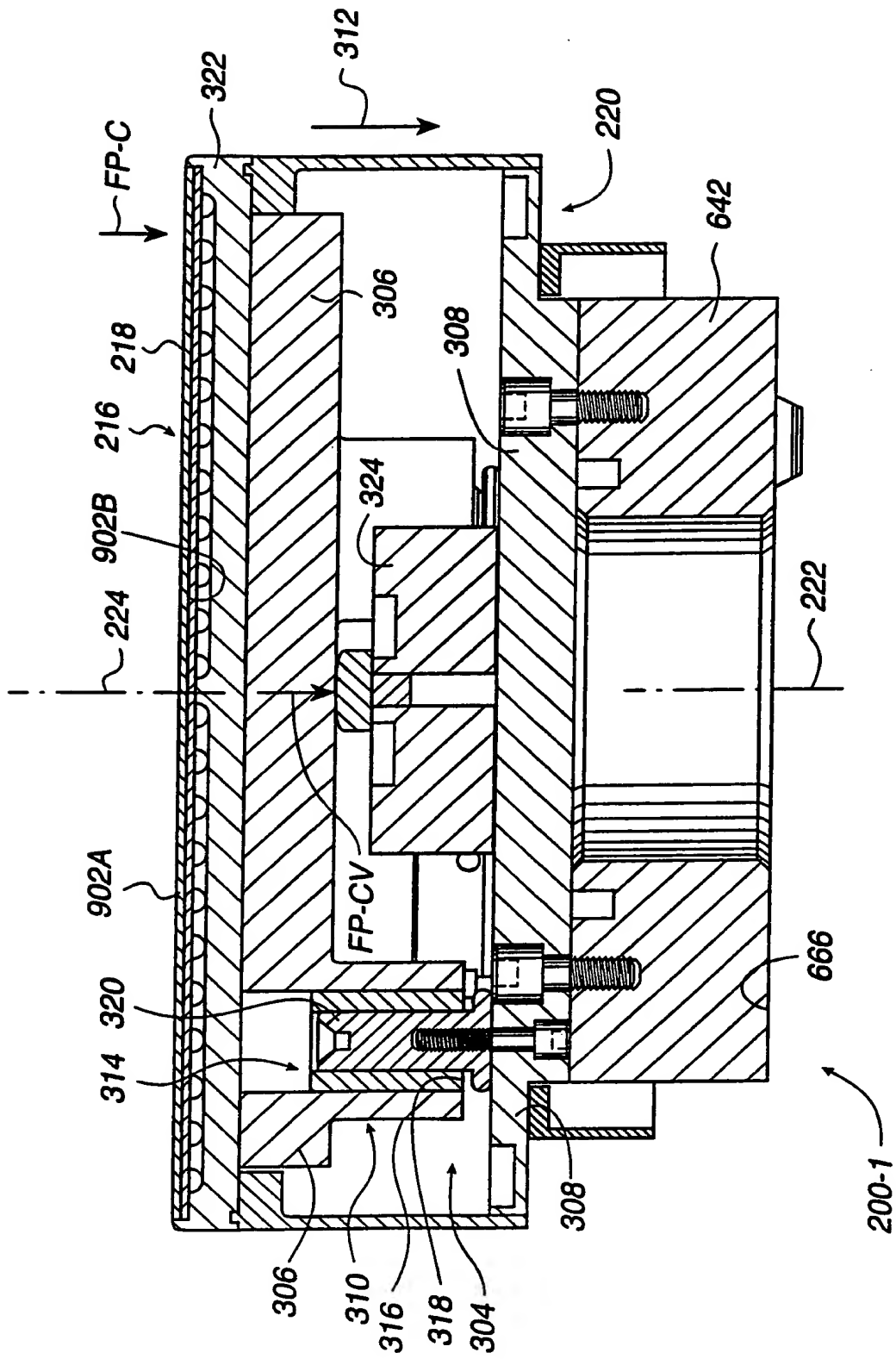


FIG. 19B

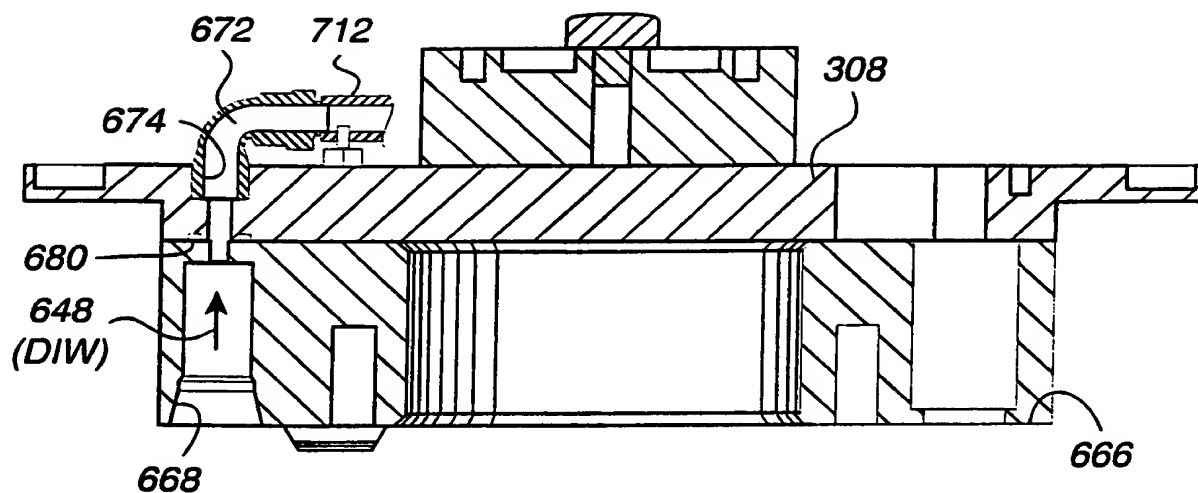


FIG. 20

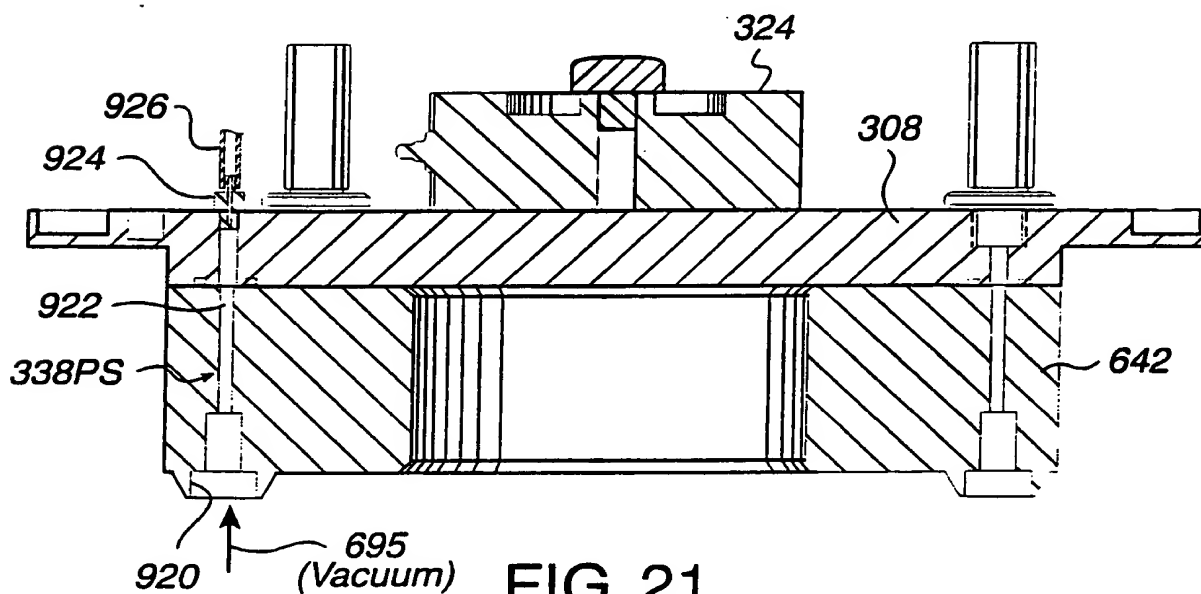


FIG. 21

FIG. 22



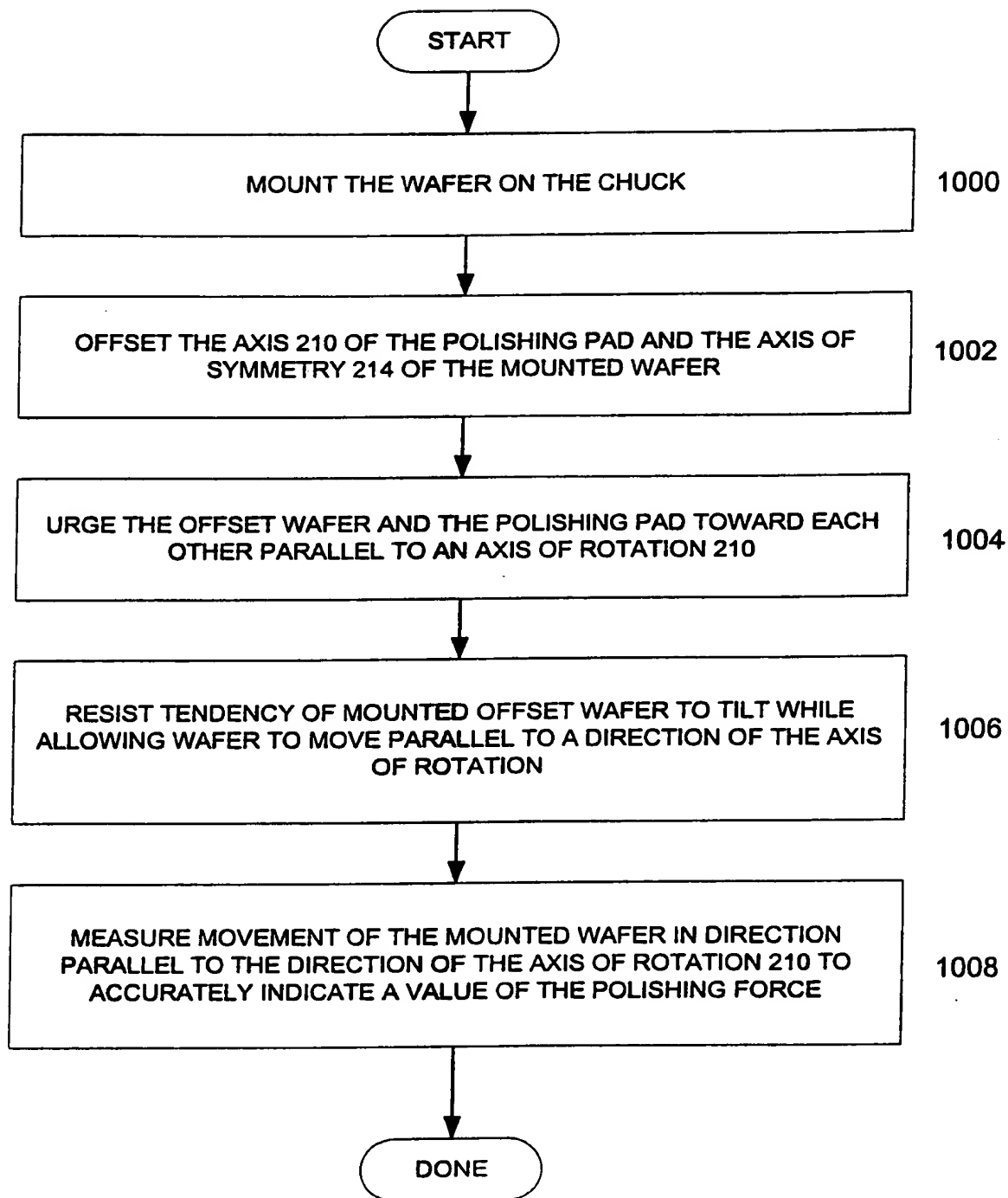


FIGURE 23

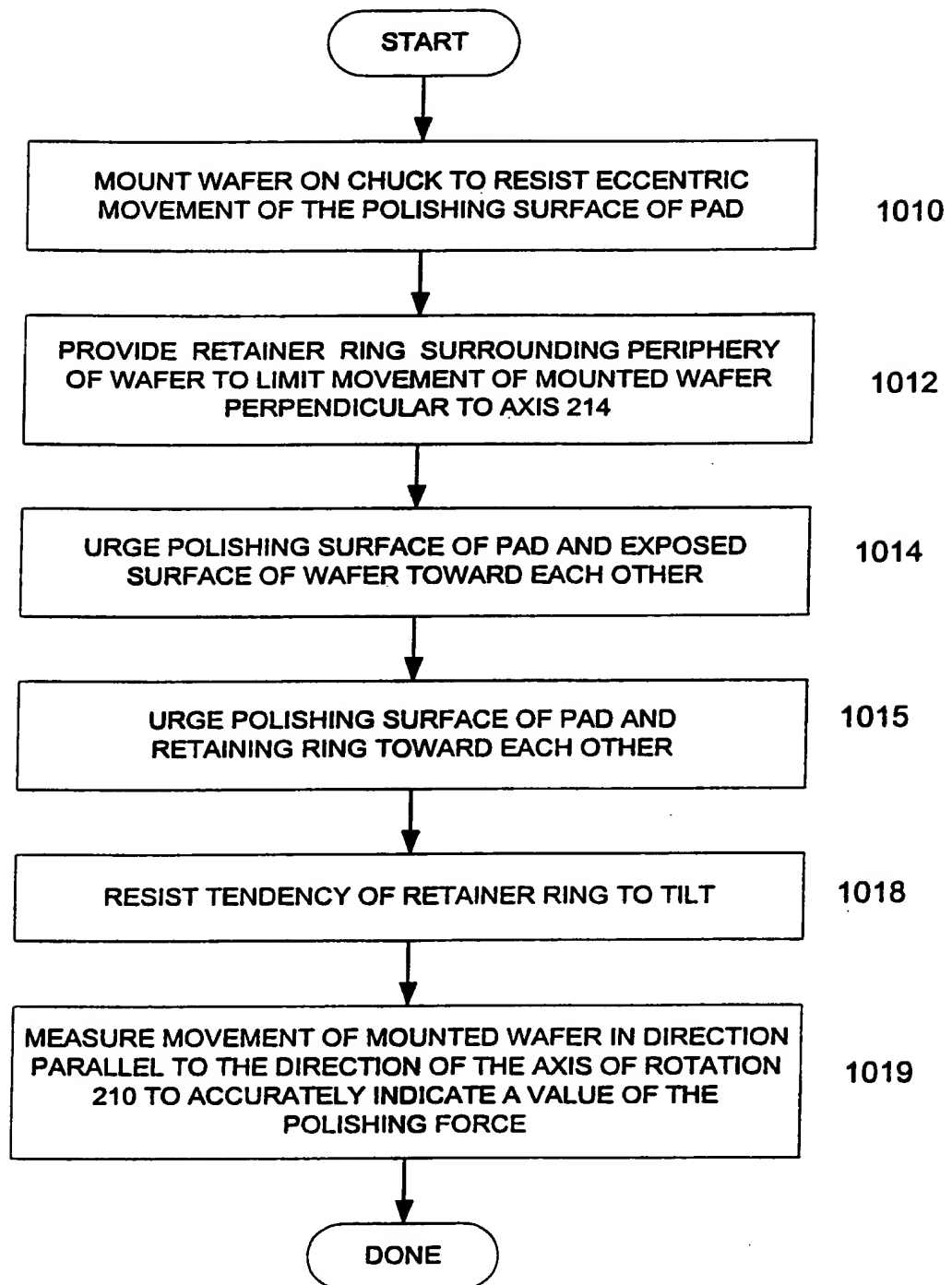


FIGURE 24

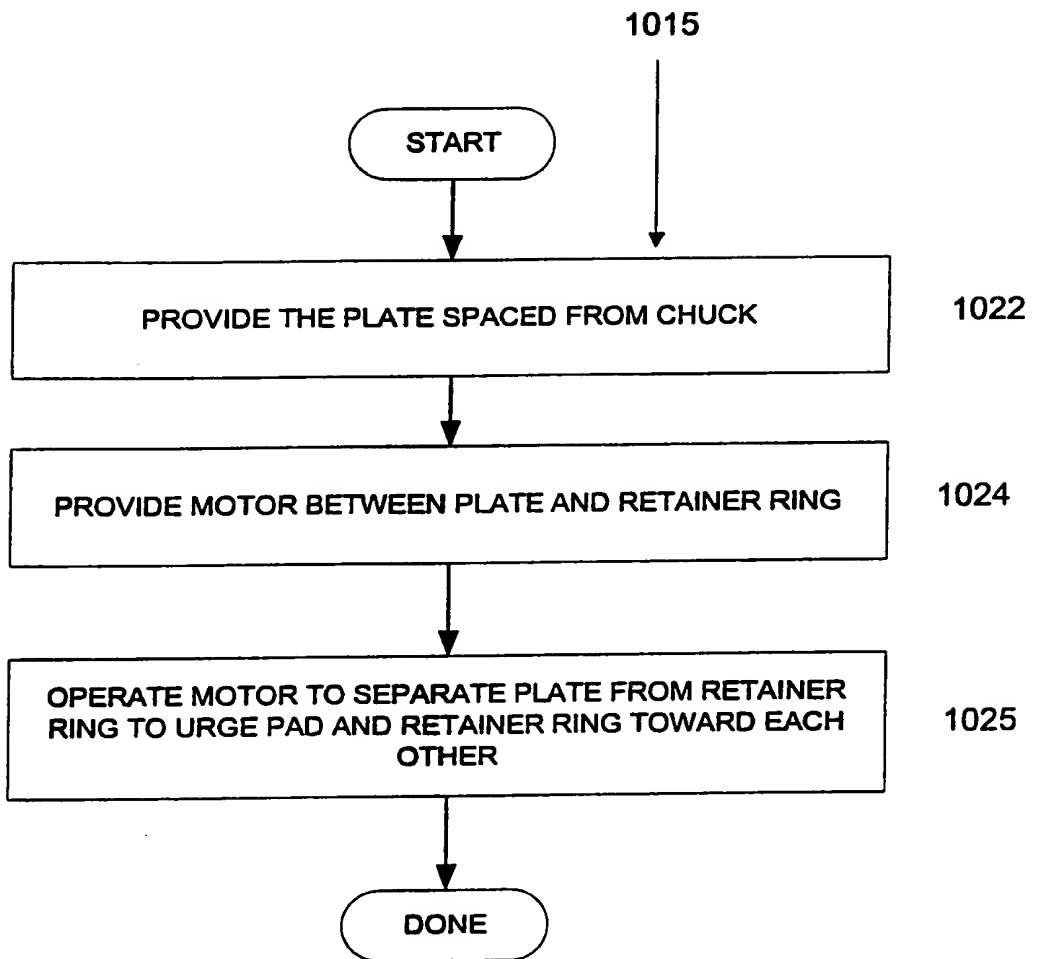


FIGURE 25

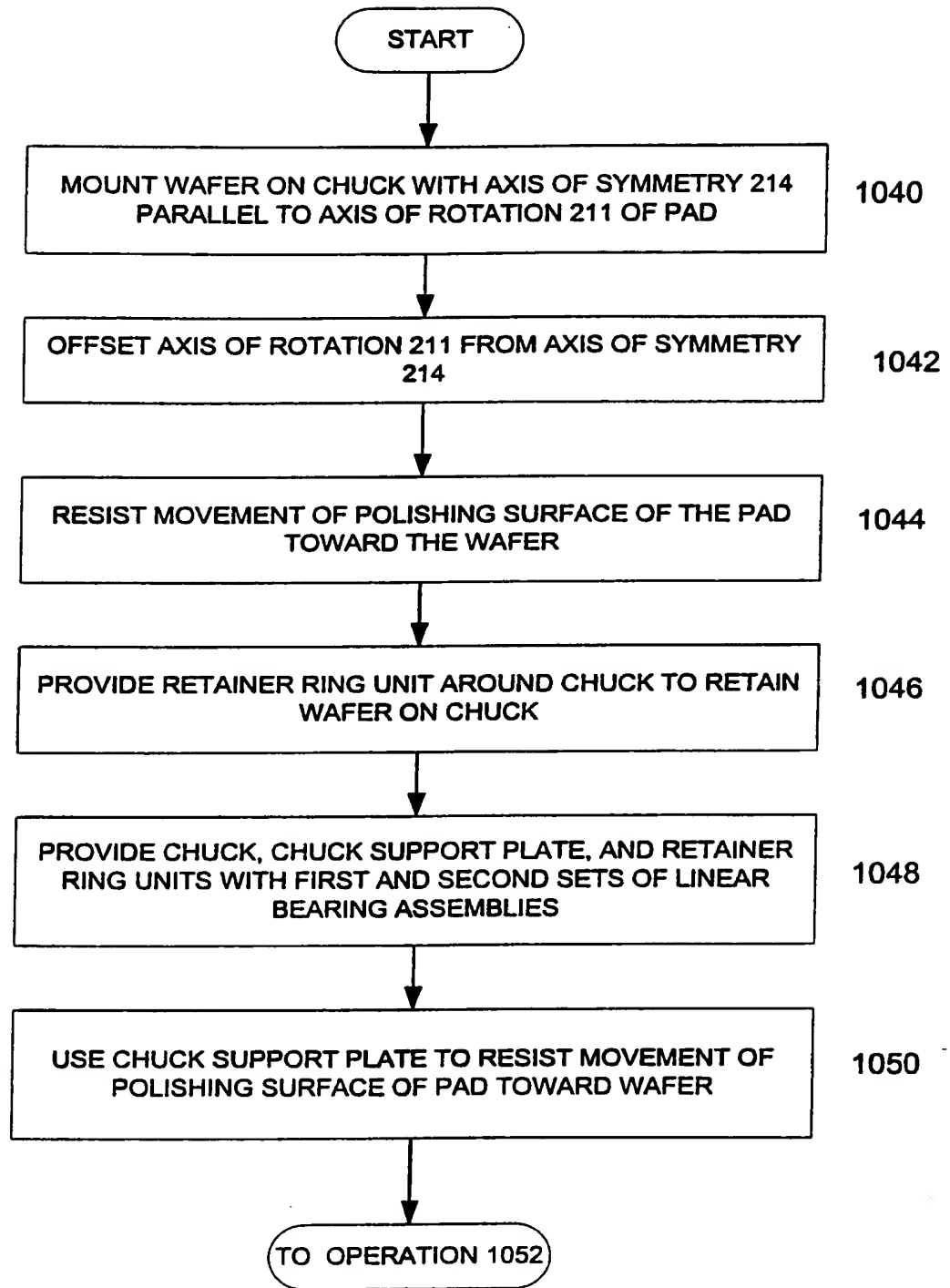


FIGURE 26

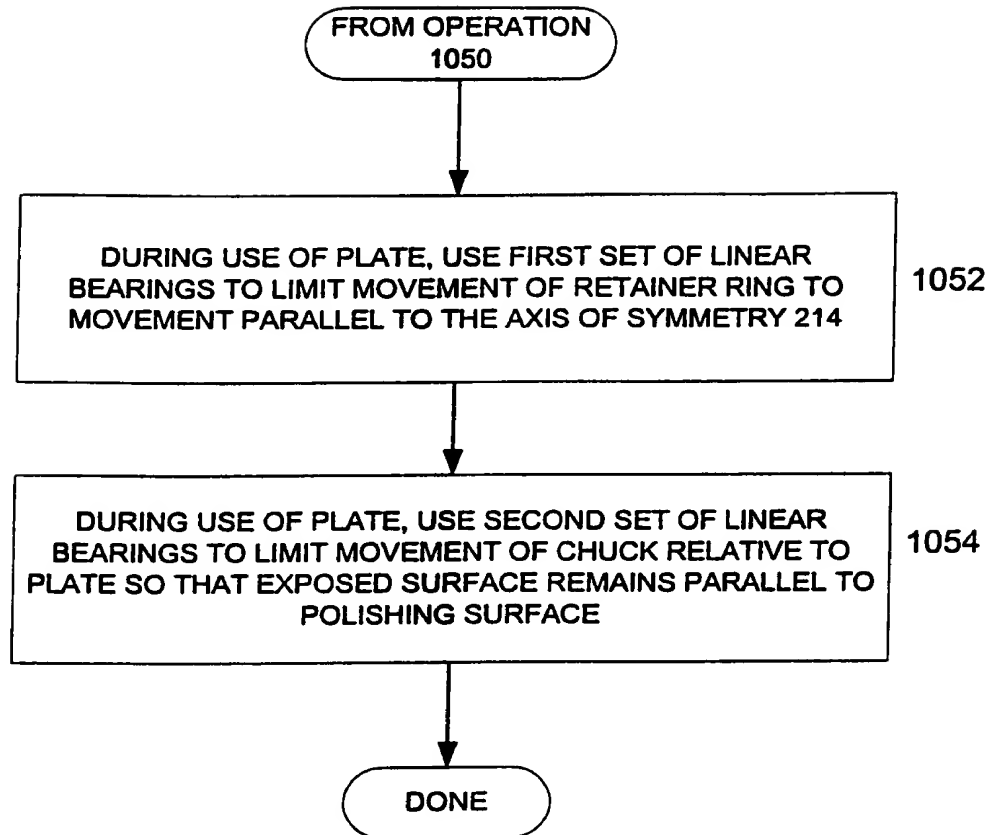


FIGURE 27

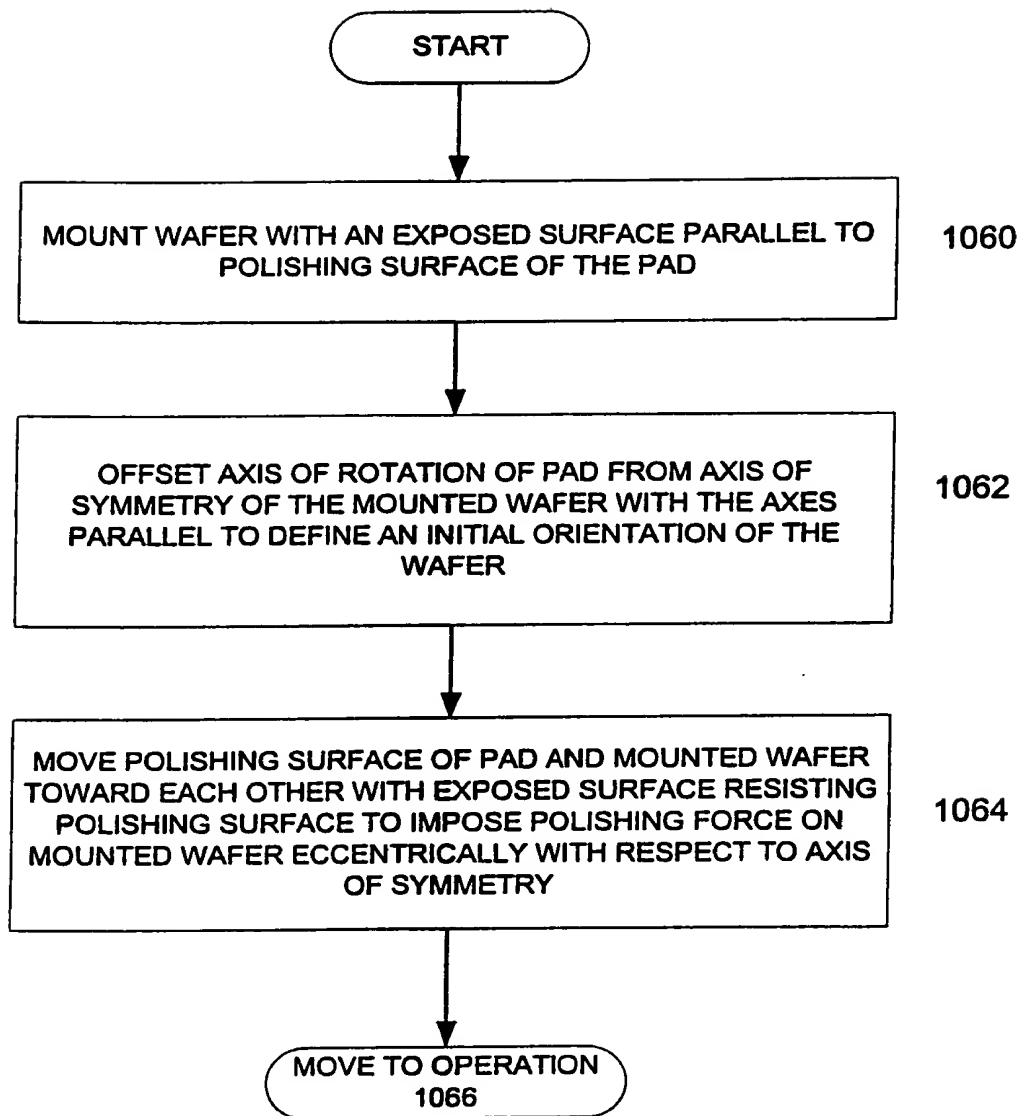


FIGURE 28

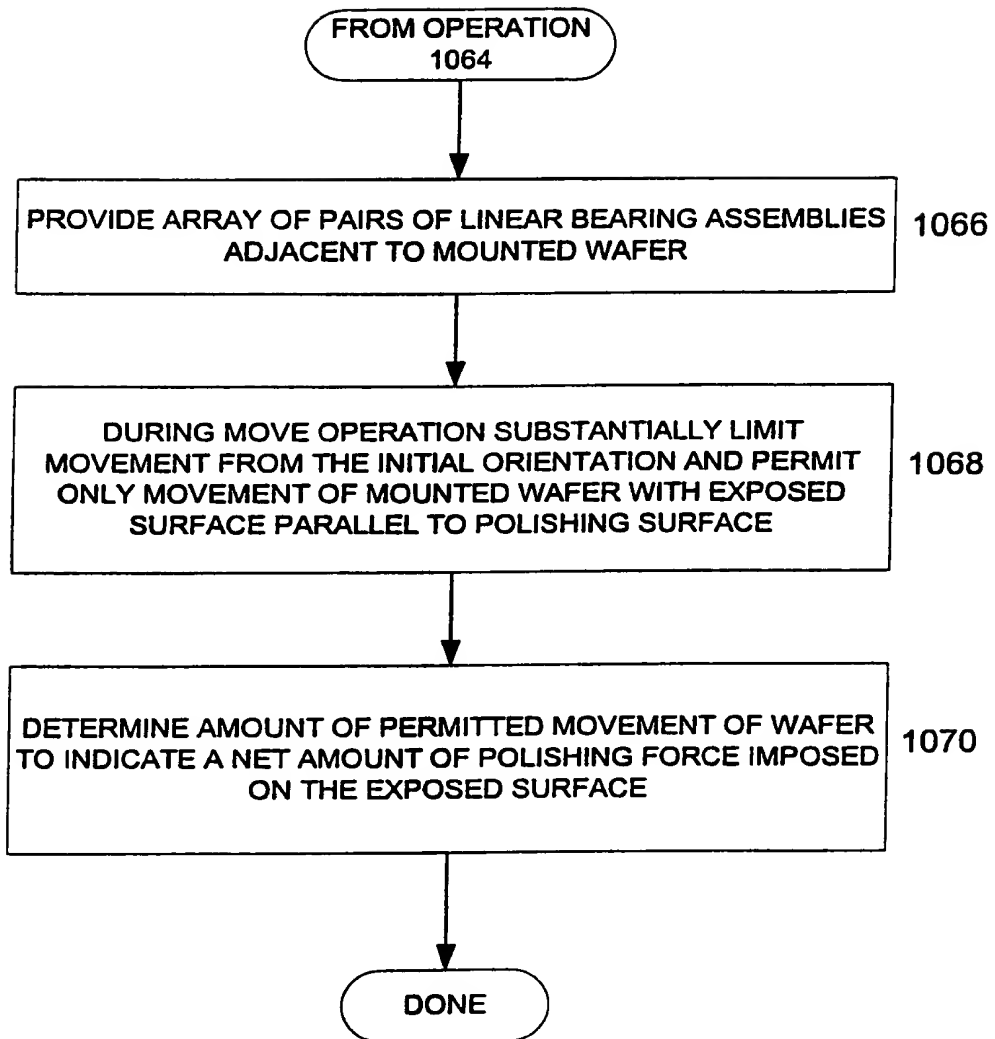


FIGURE 29

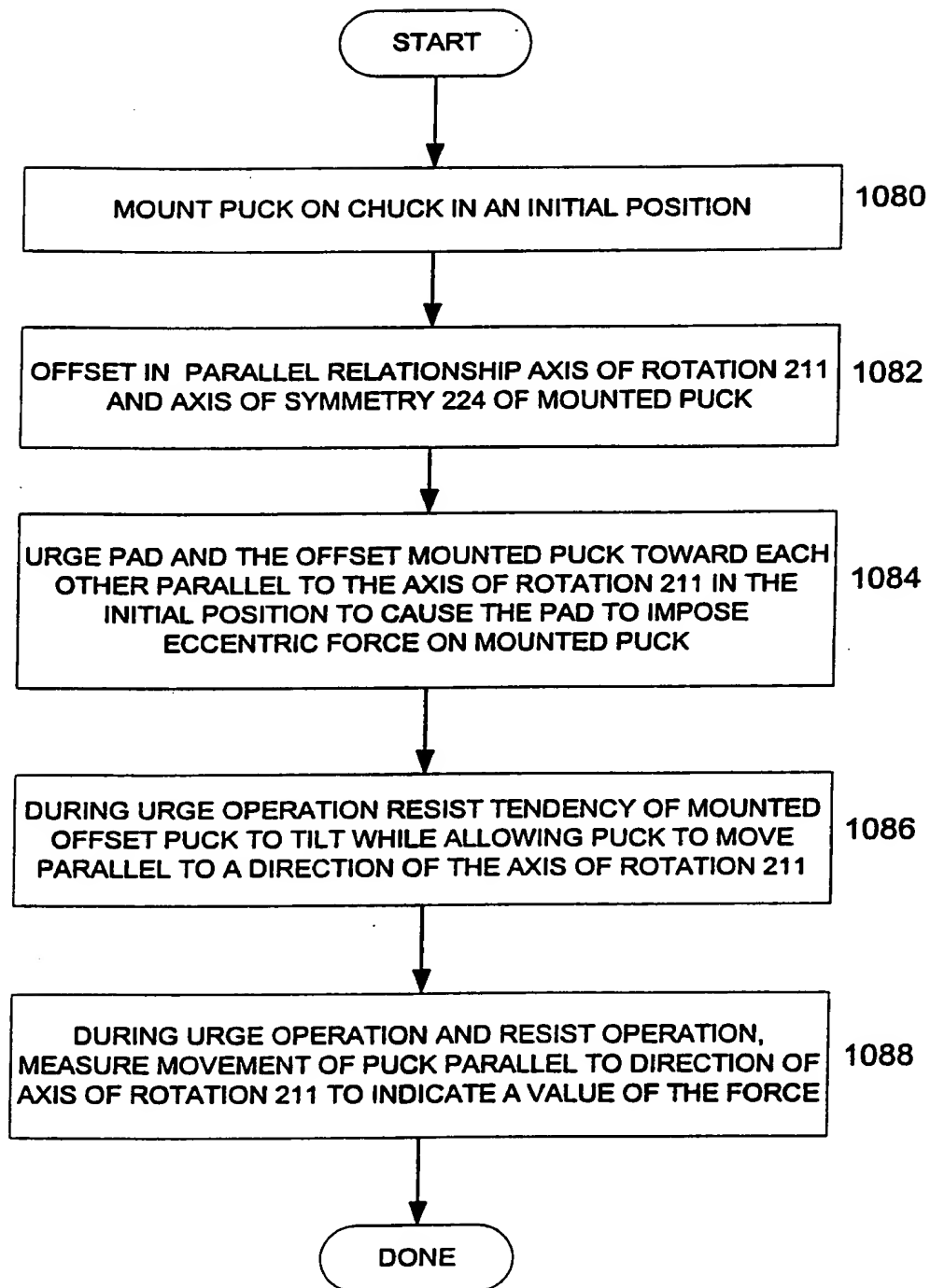


FIGURE 30



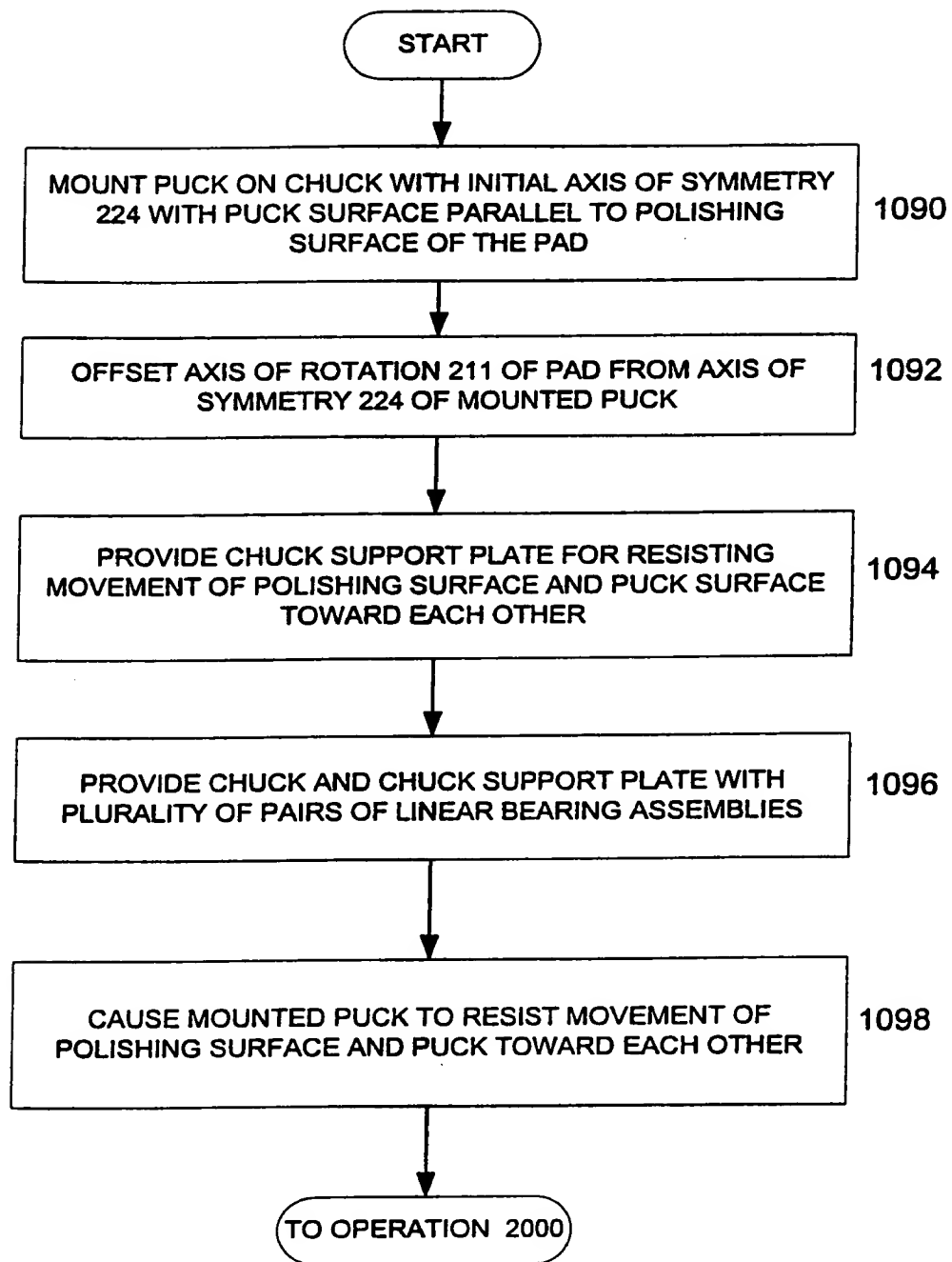


FIGURE 31

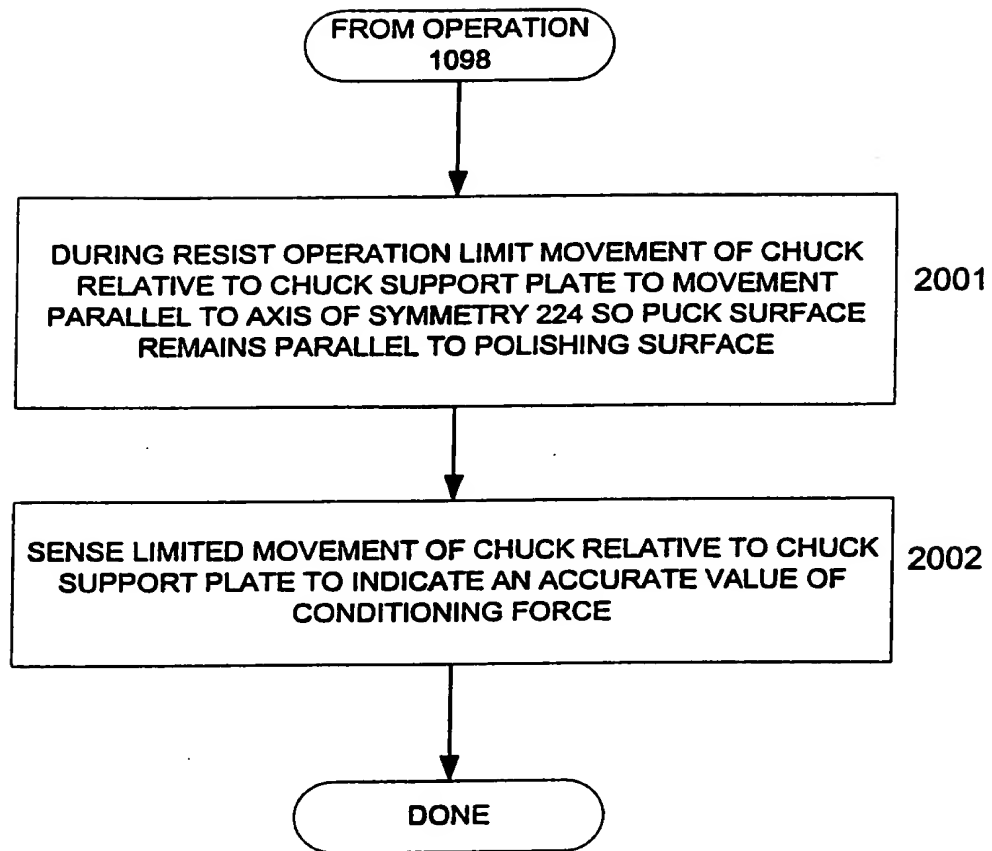


FIGURE 32

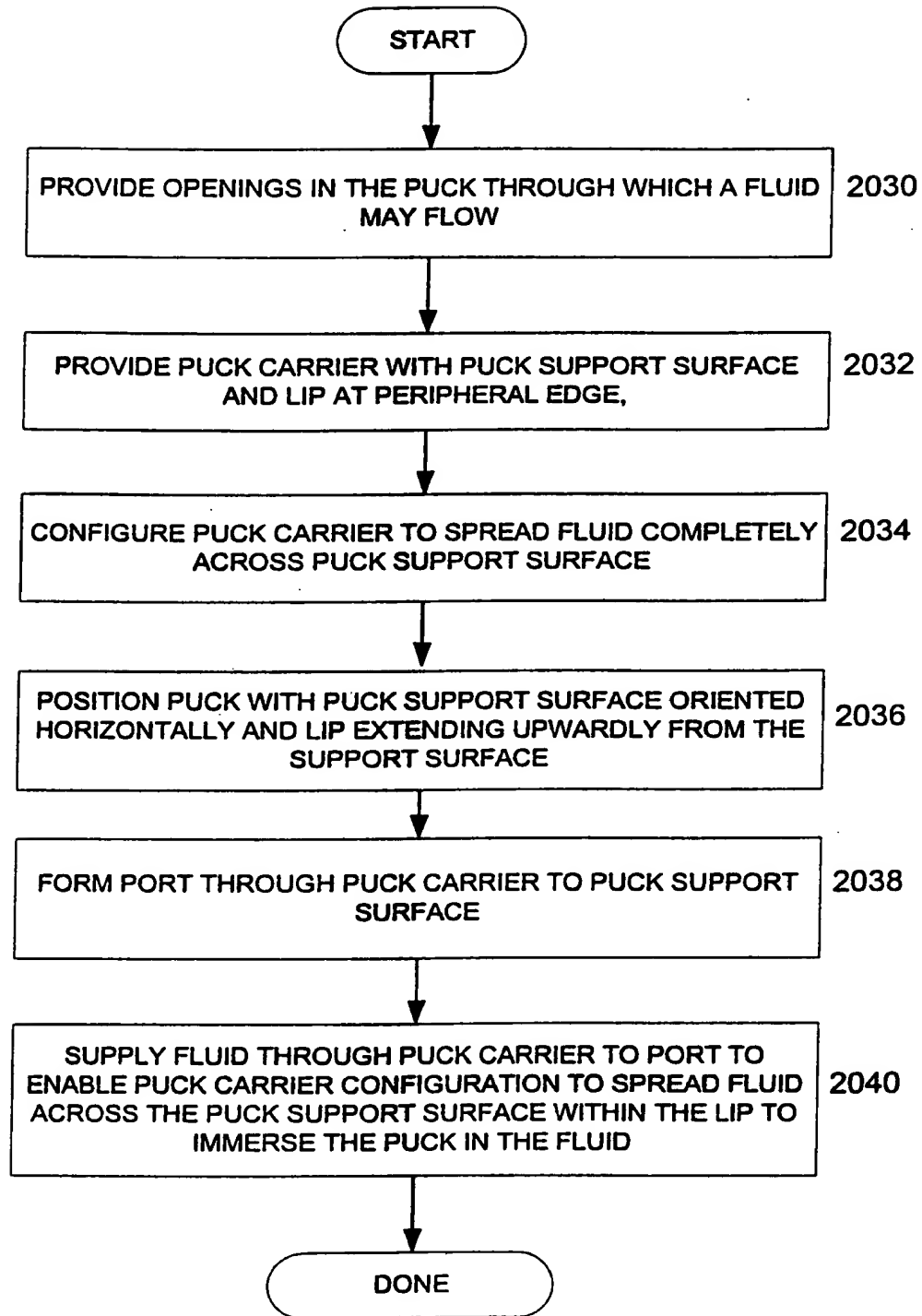


FIGURE 33

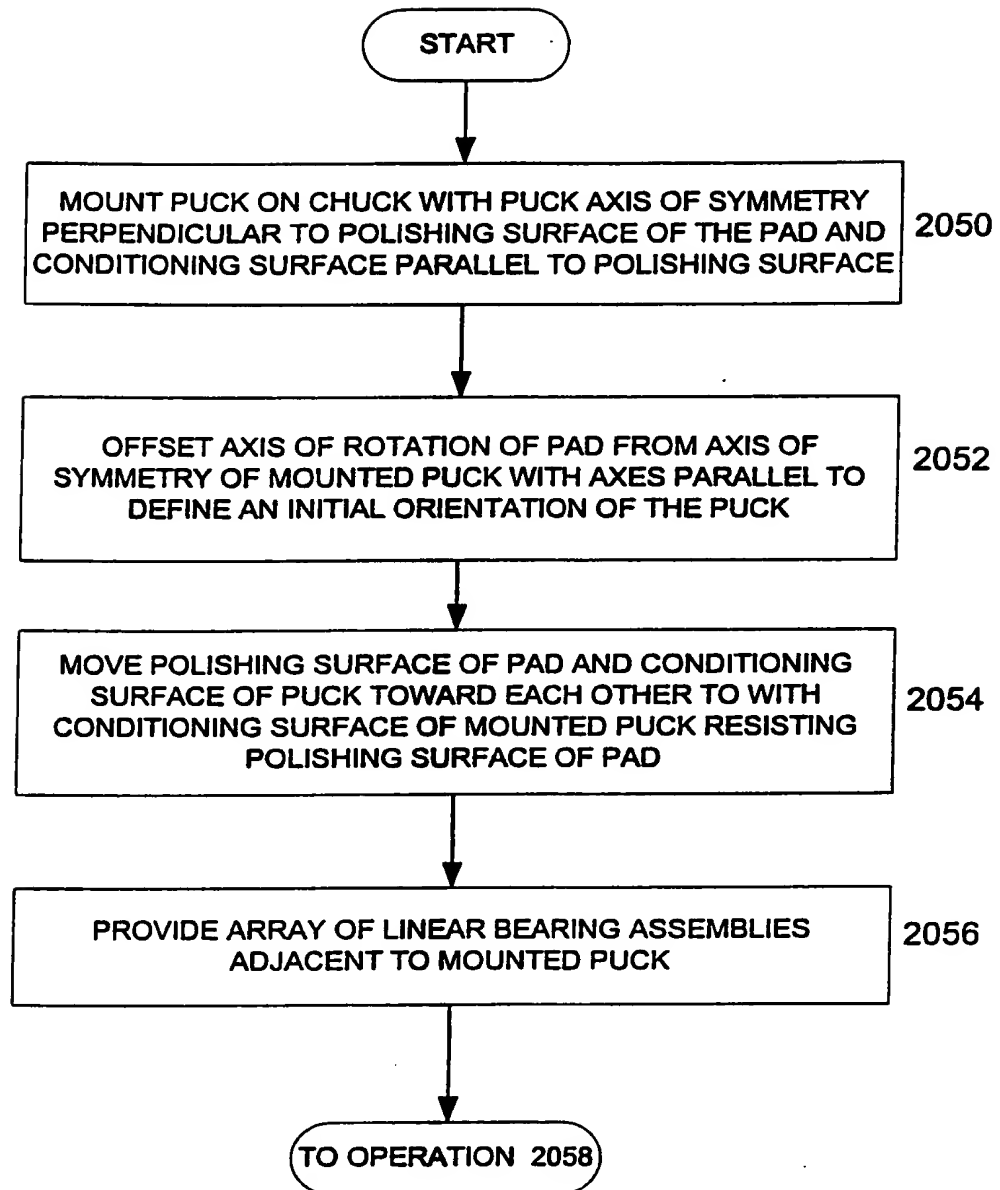


FIGURE 34

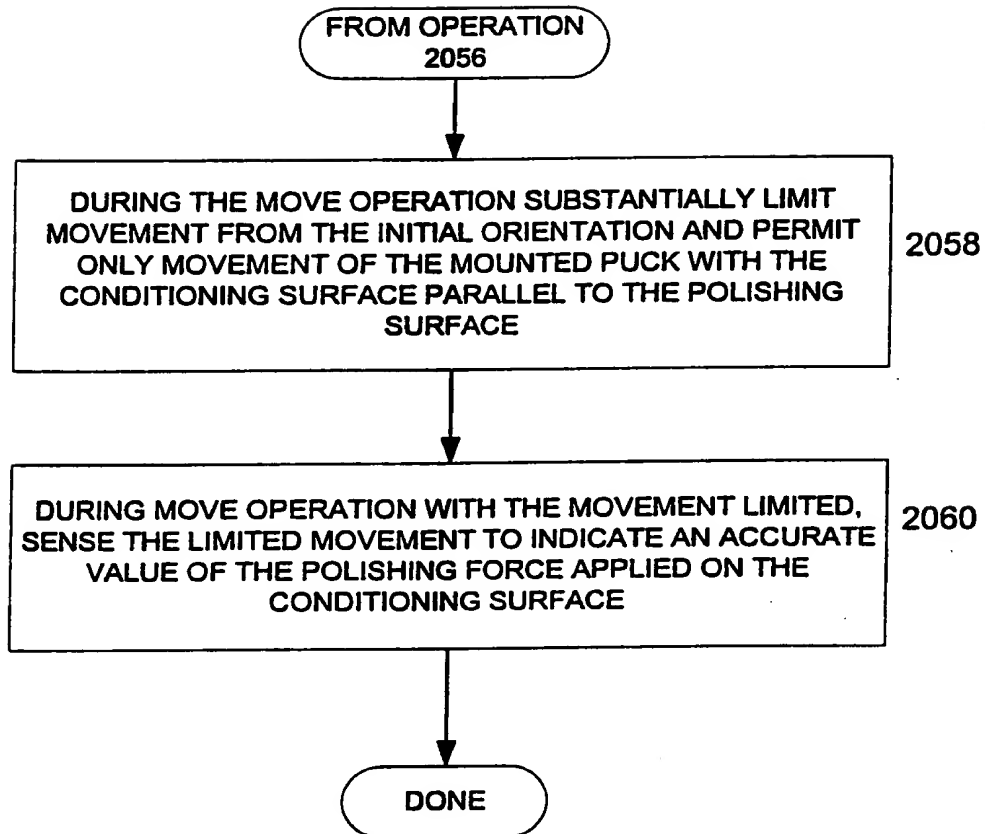


FIGURE 35

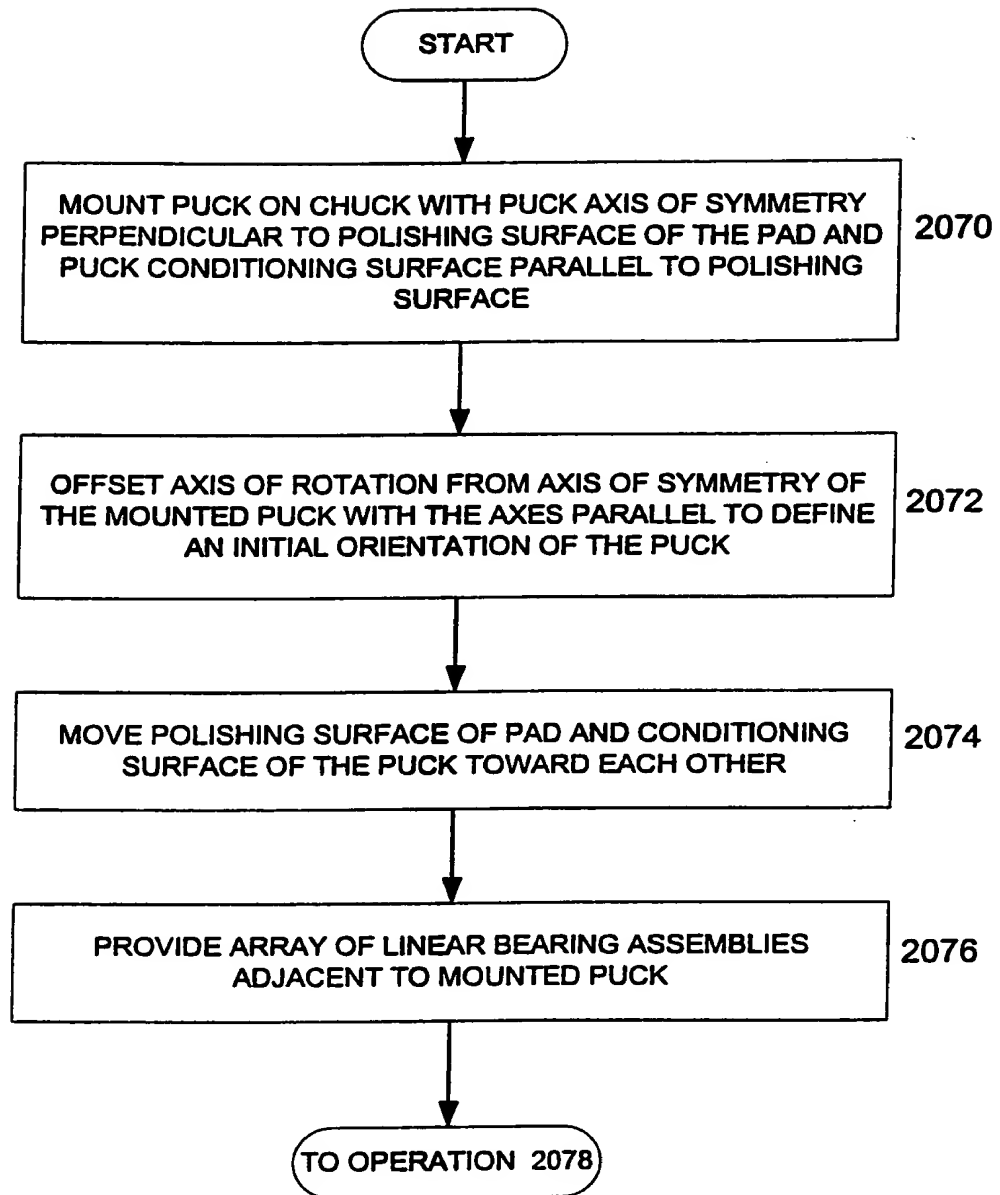


FIGURE 36

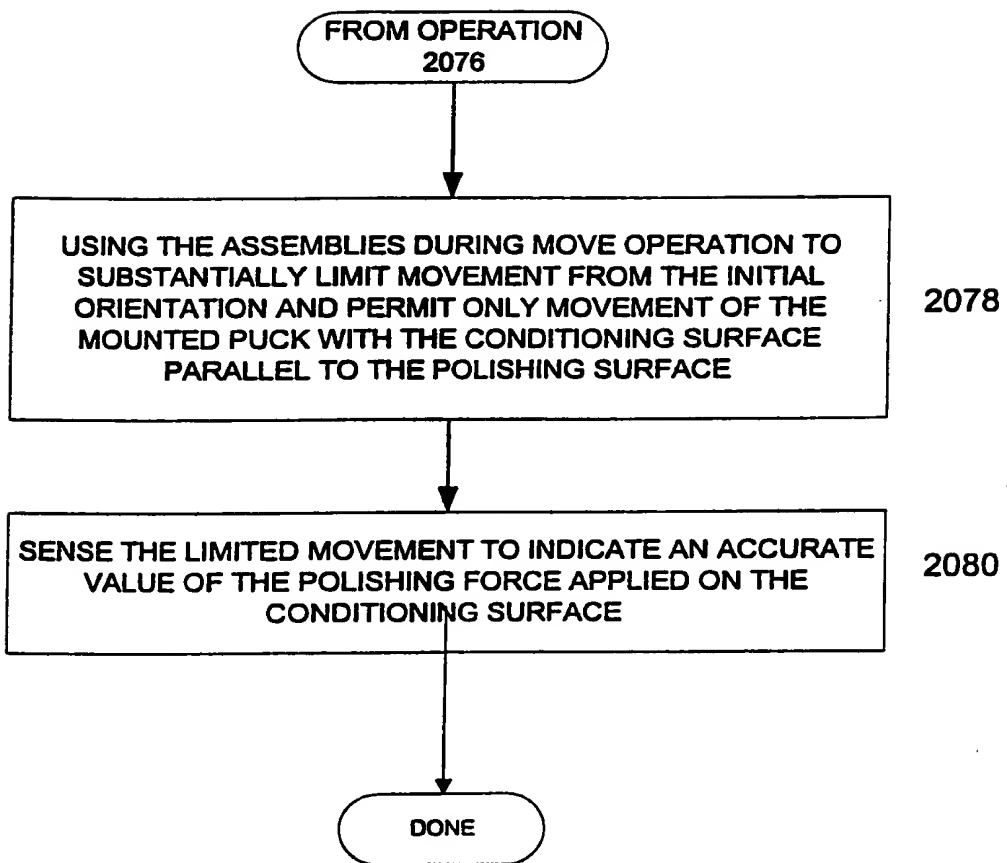


FIGURE 37

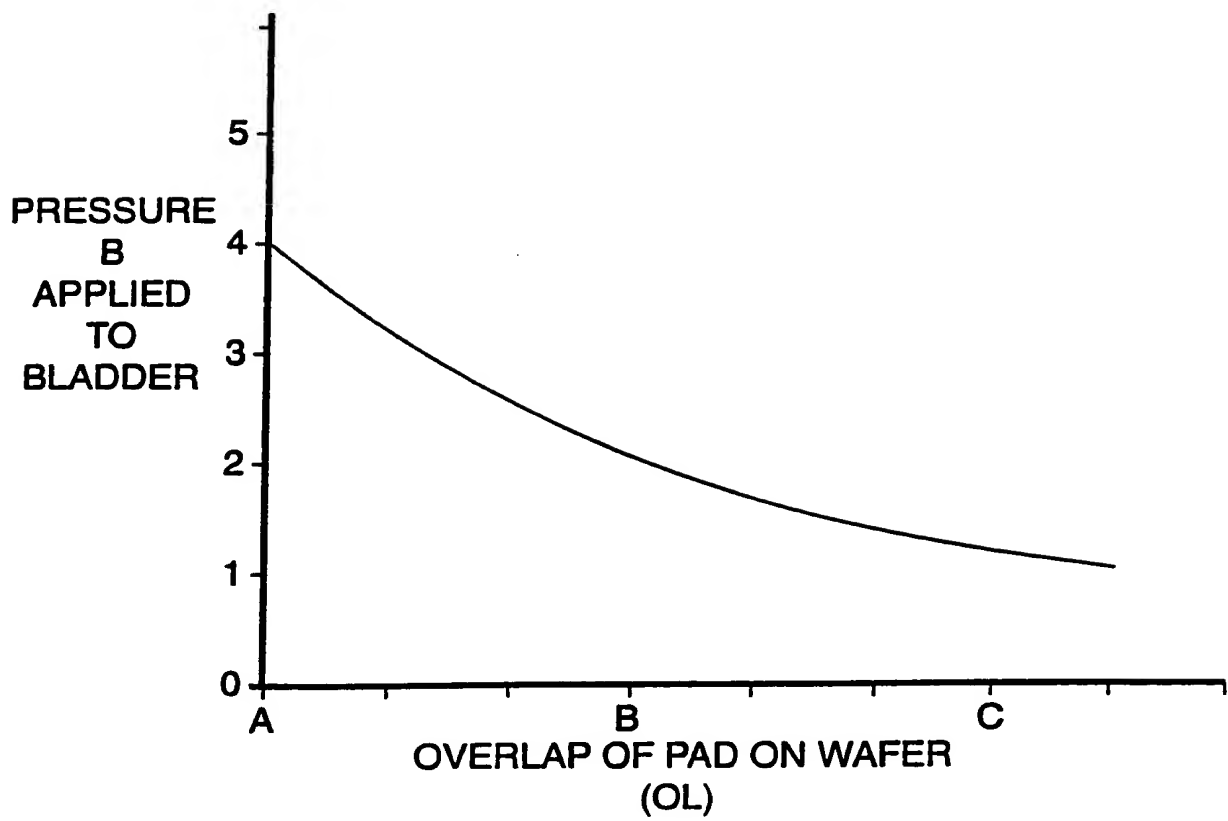
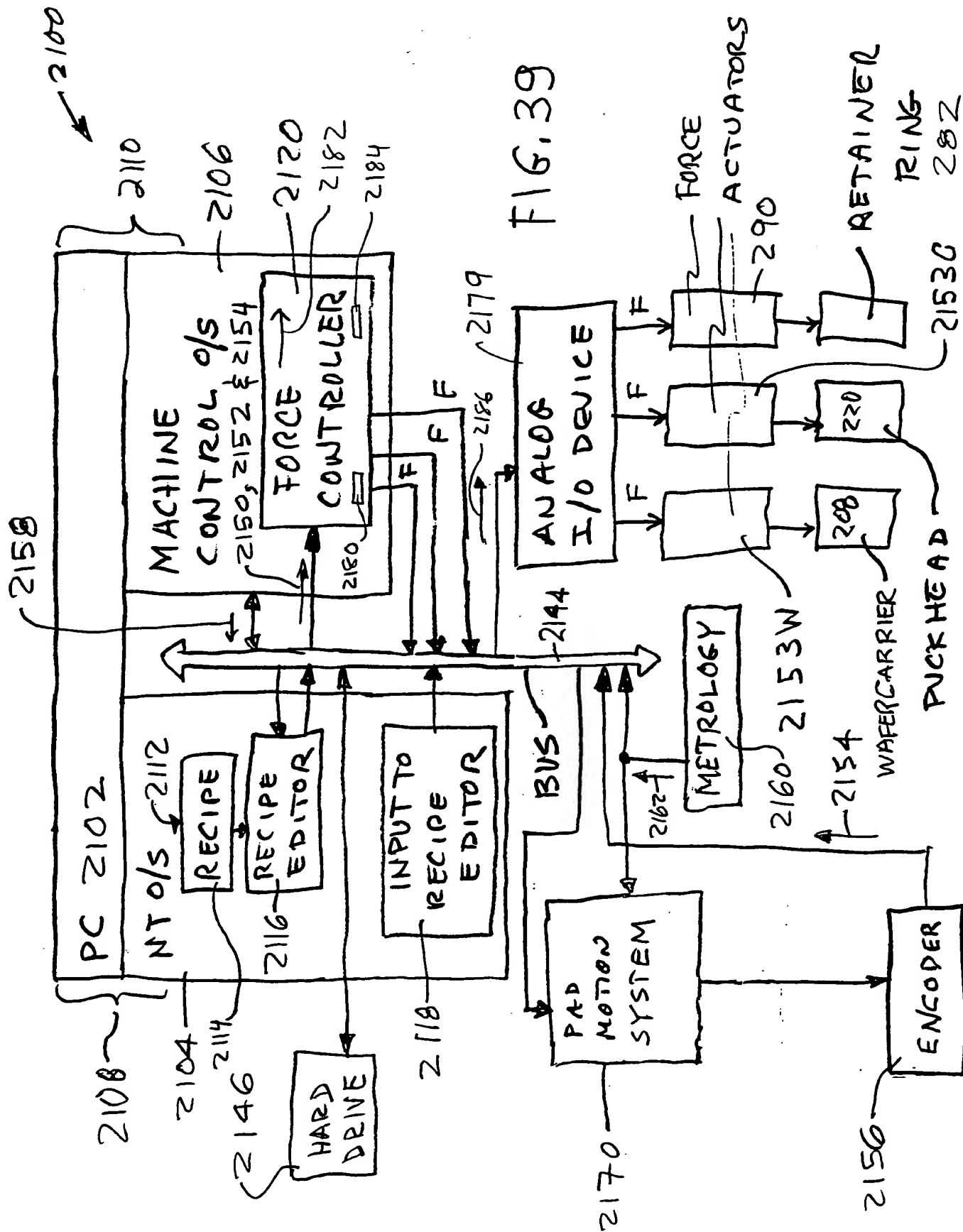
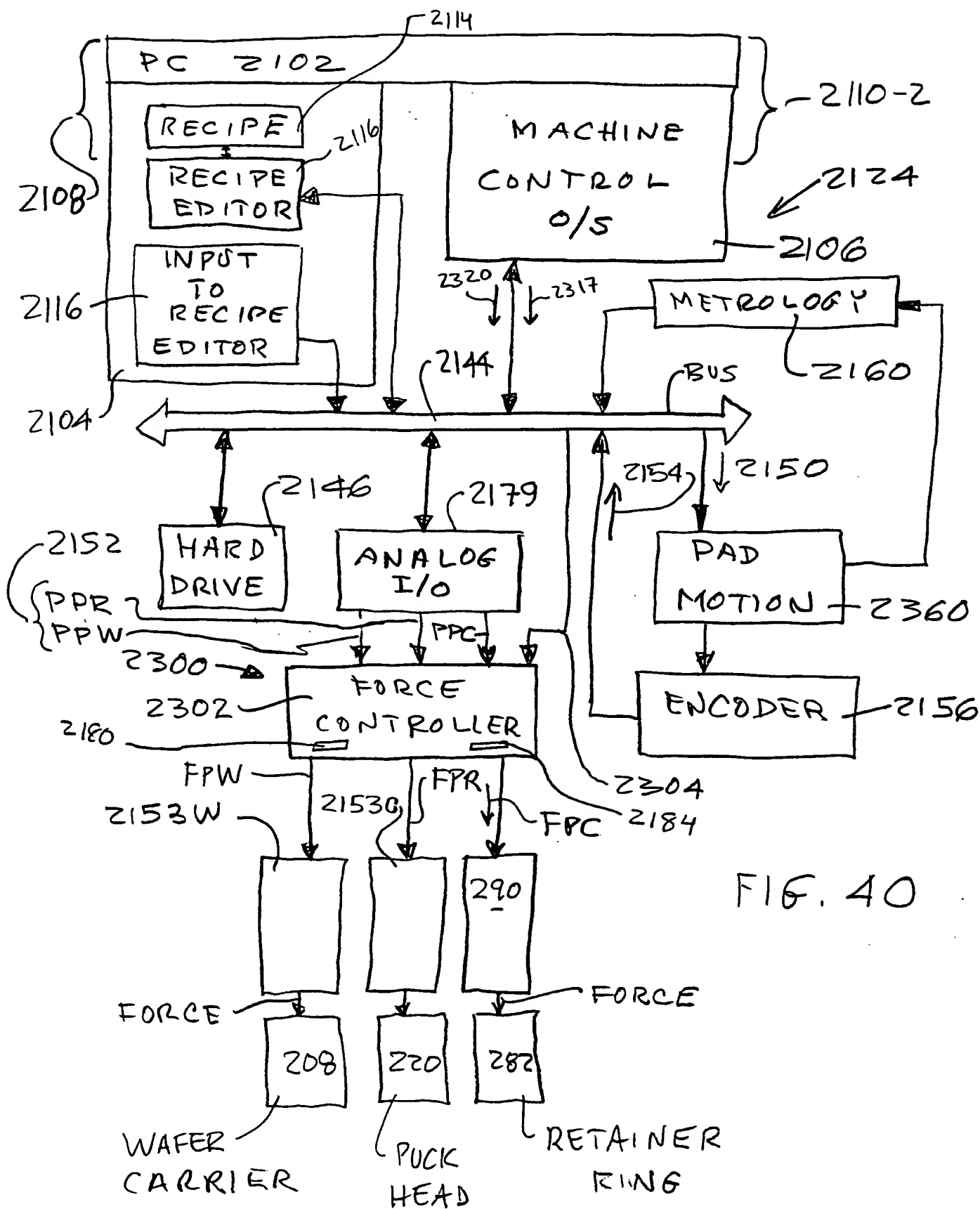


FIG. 38







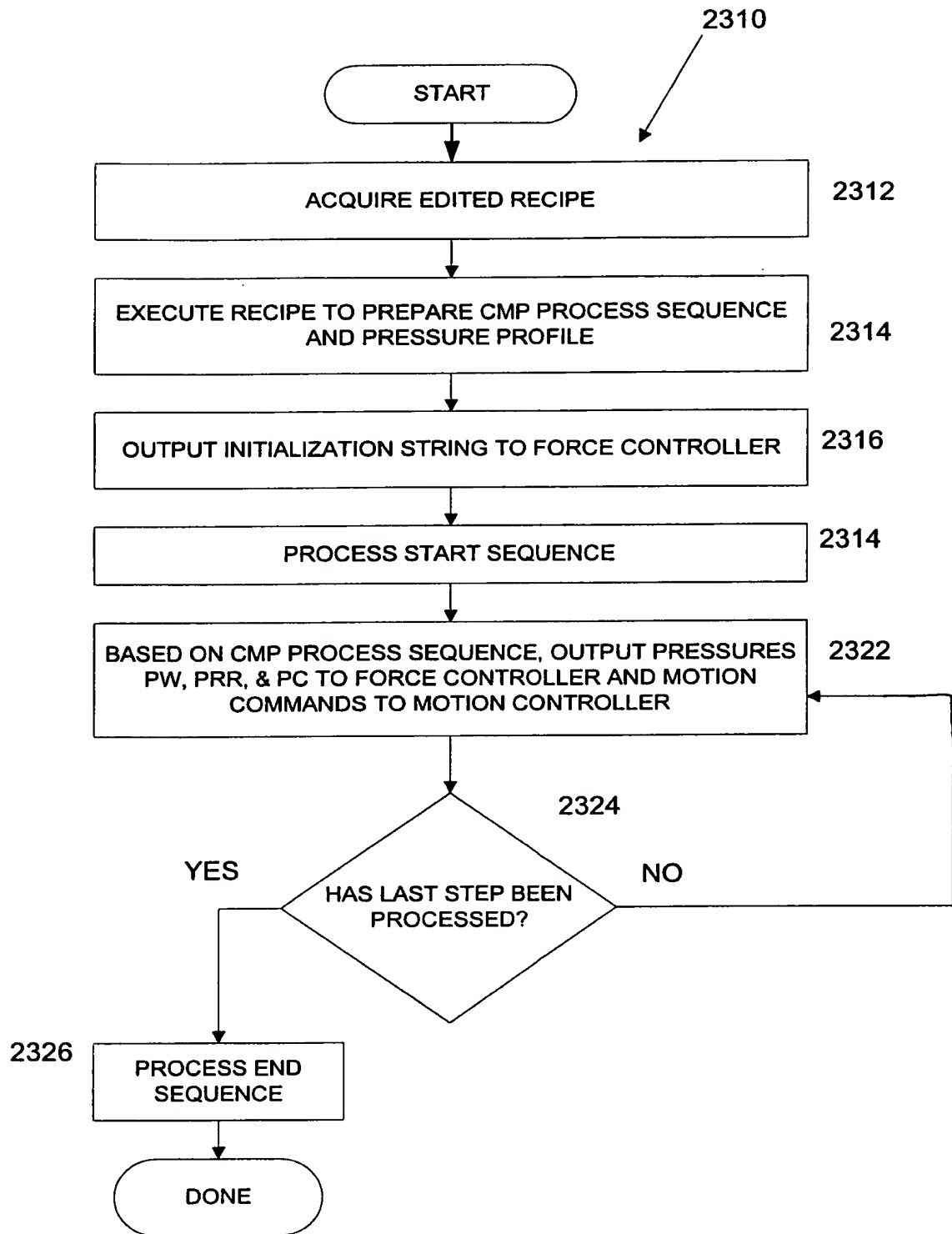


FIGURE 41

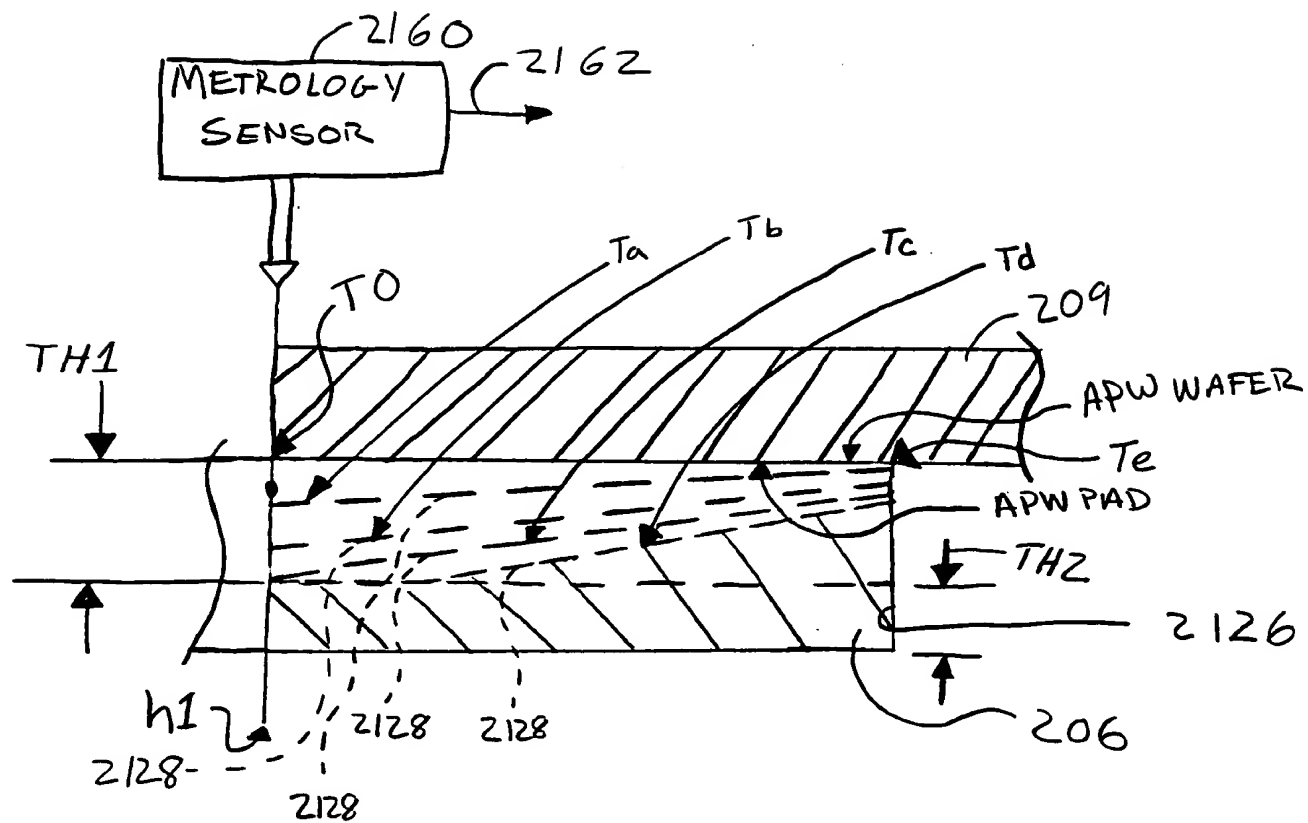


FIG. 42A

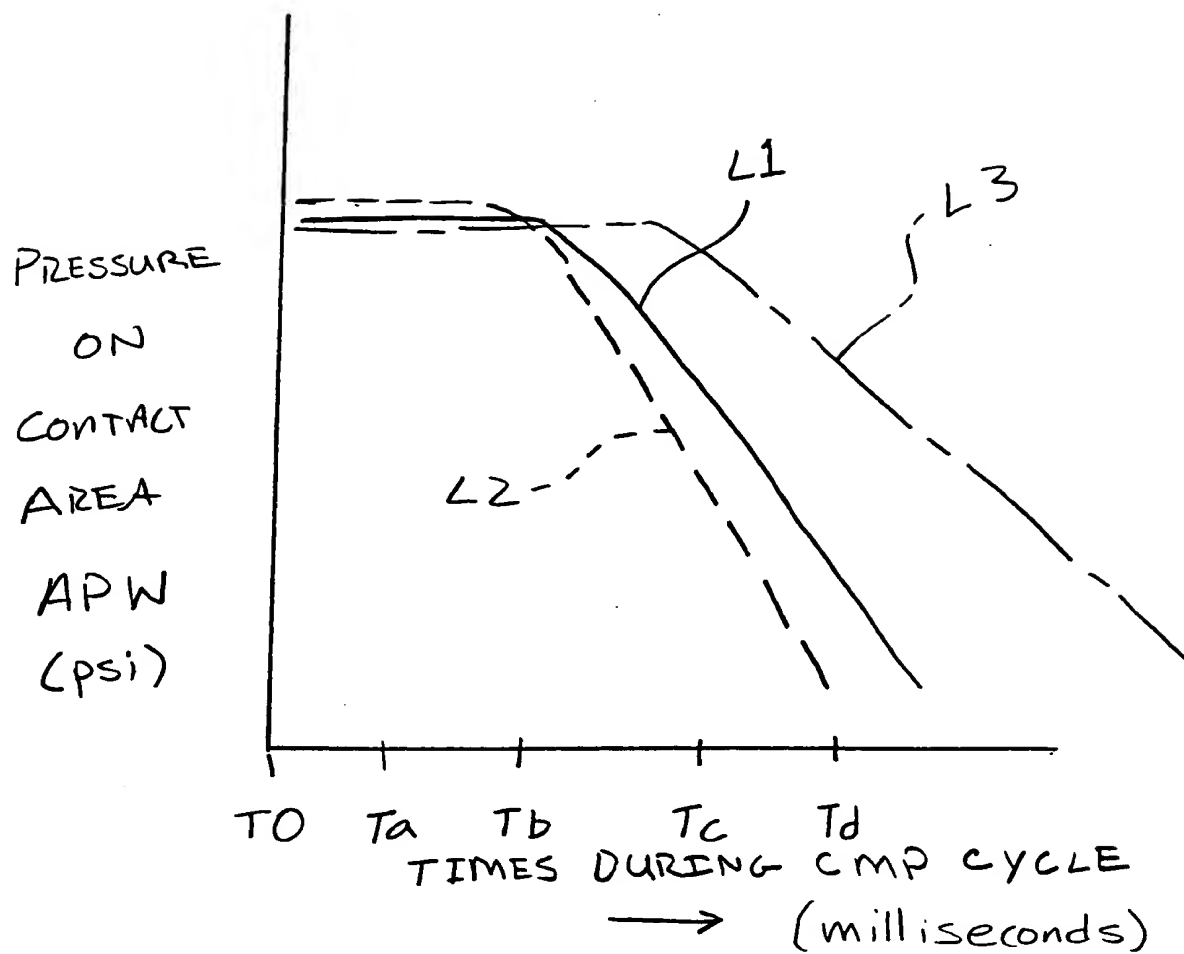


FIG. 4Z B

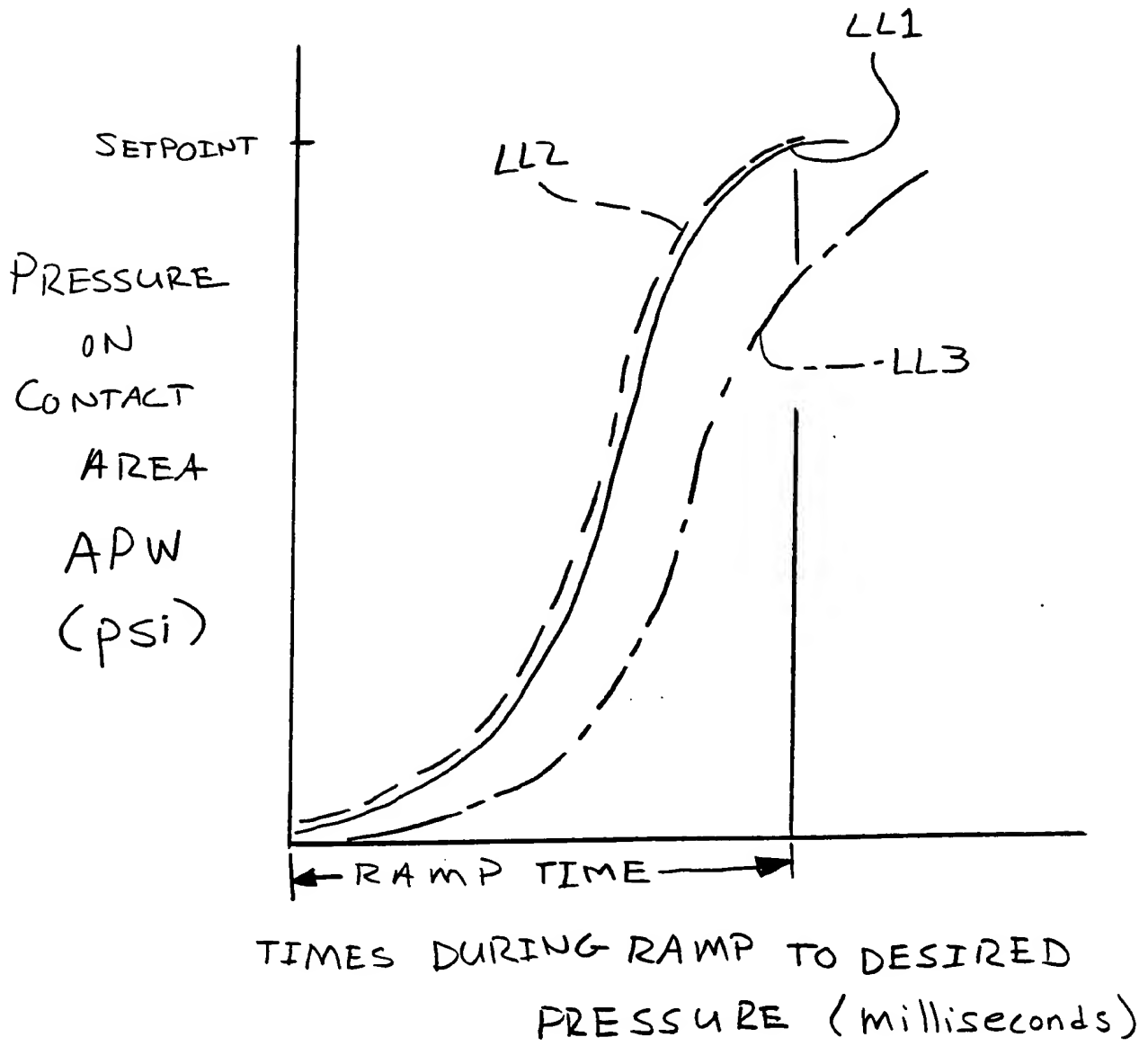


FIG. 42C

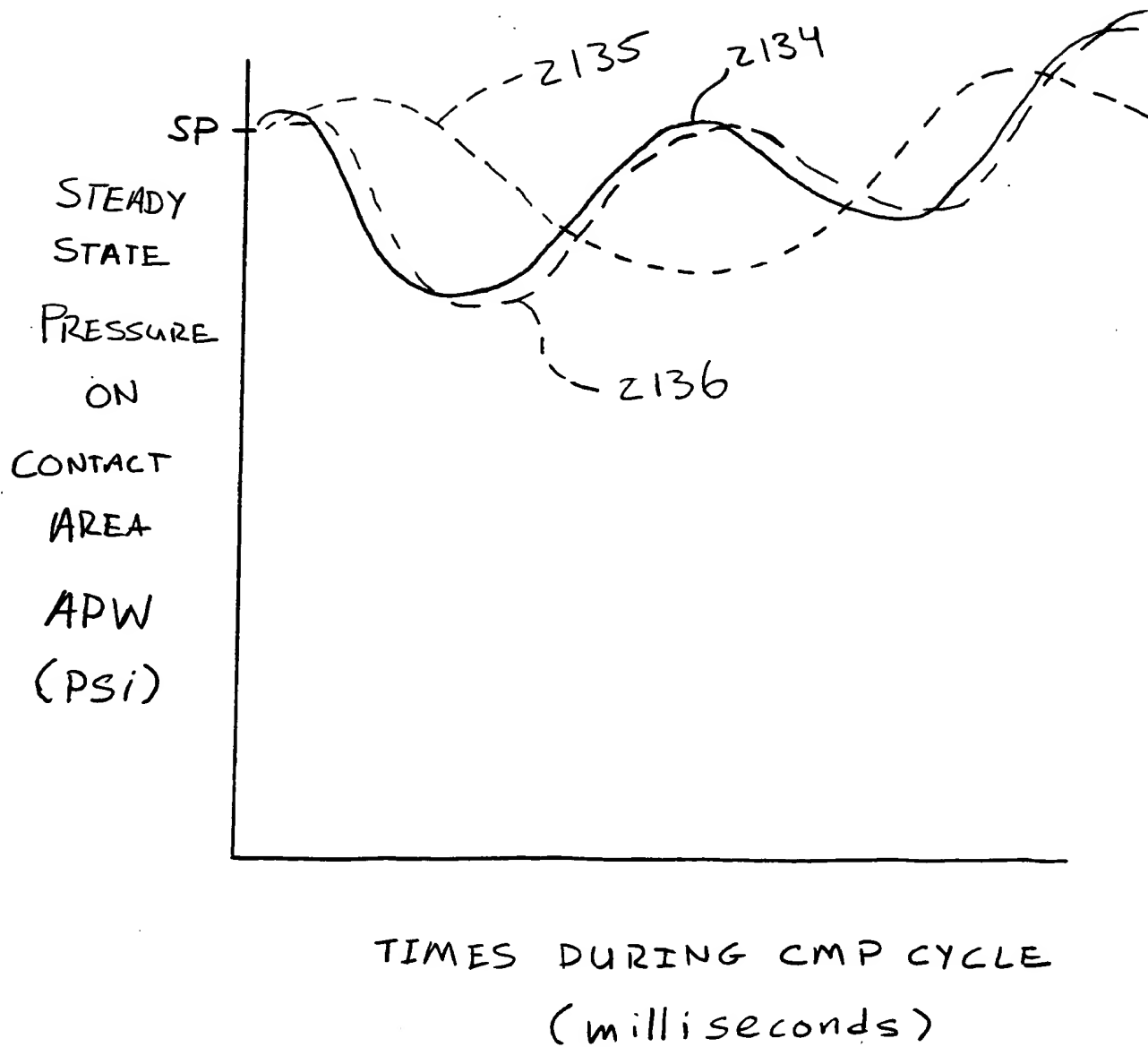


FIG. 42D

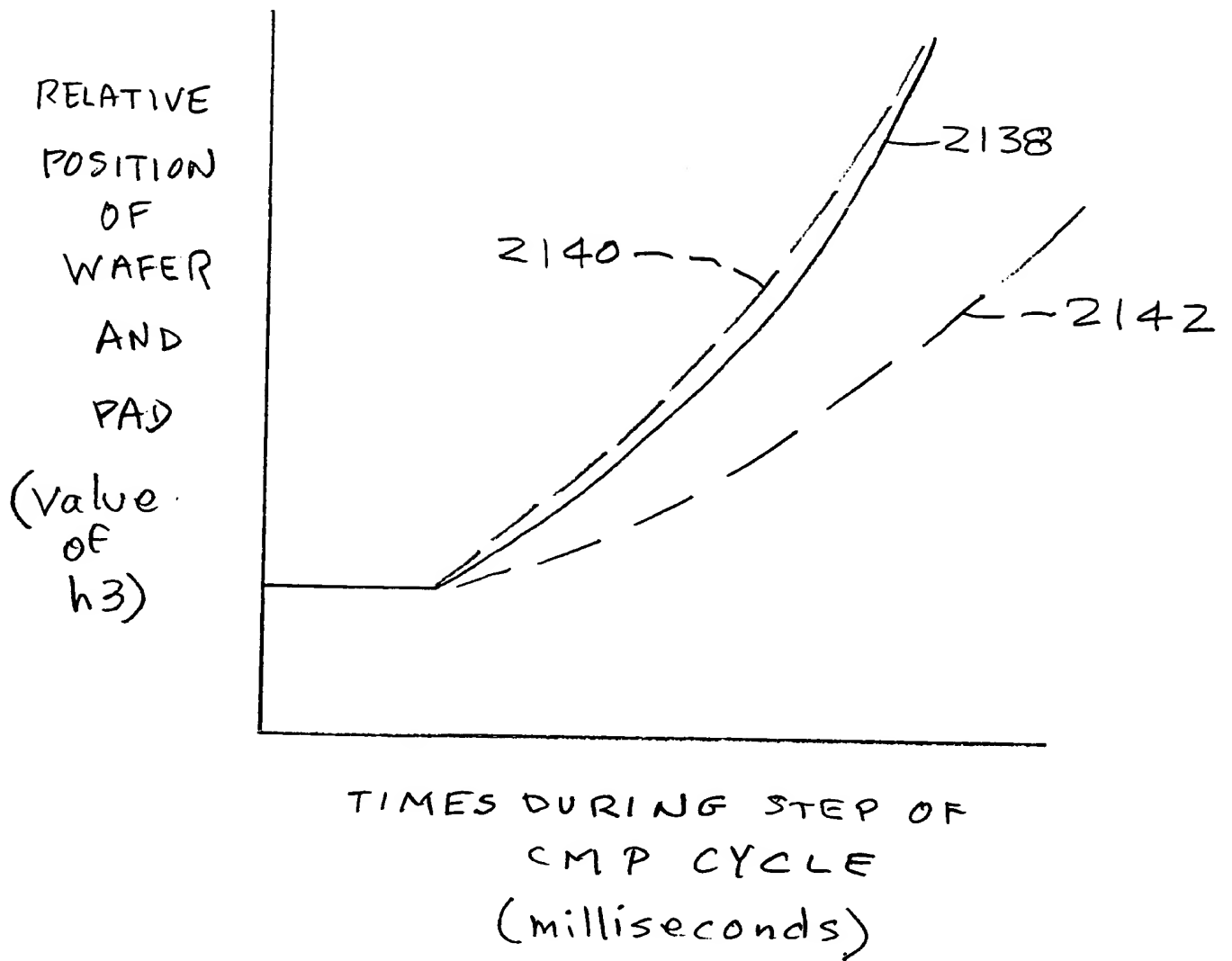


FIG. 42E



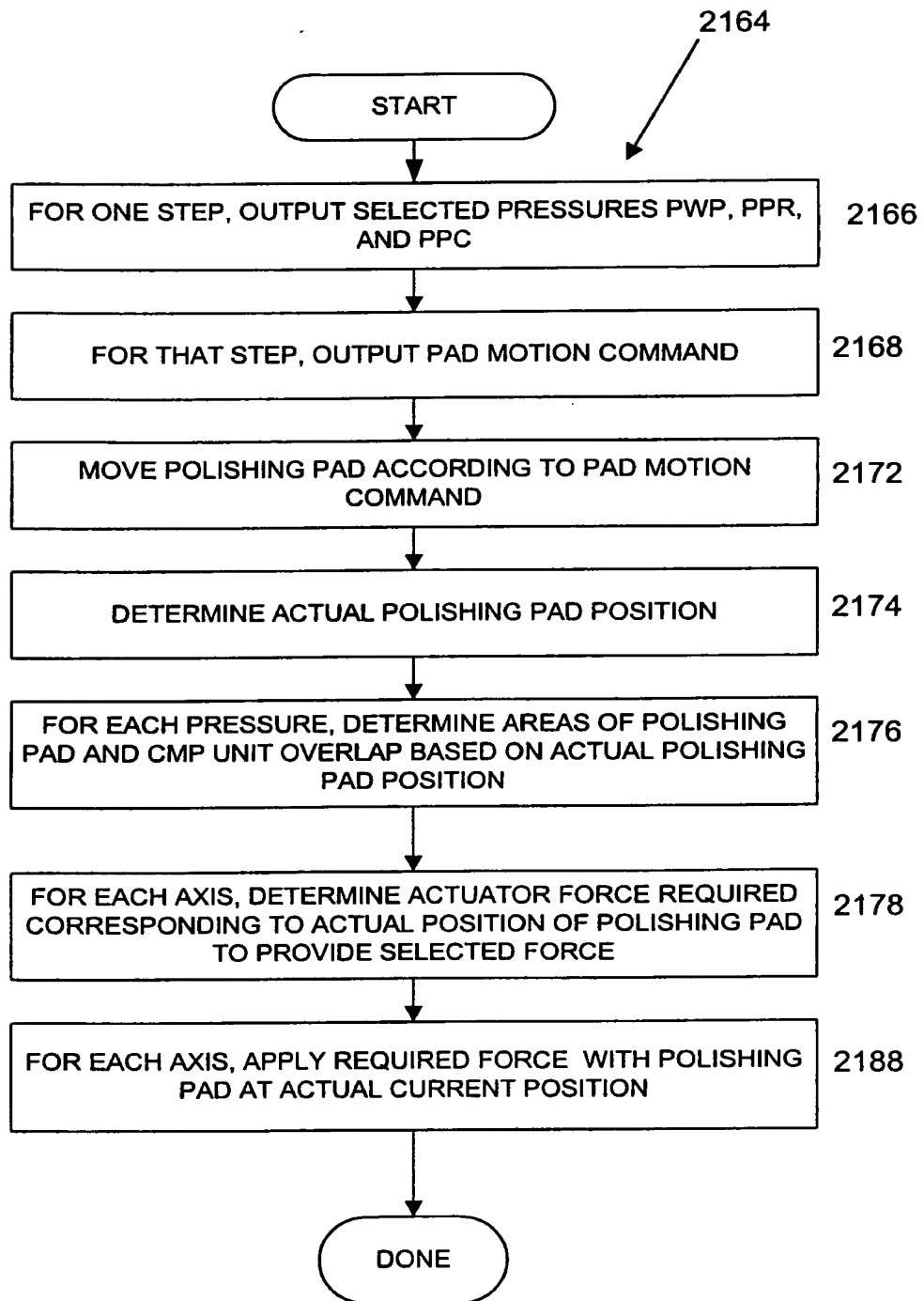


FIGURE 43

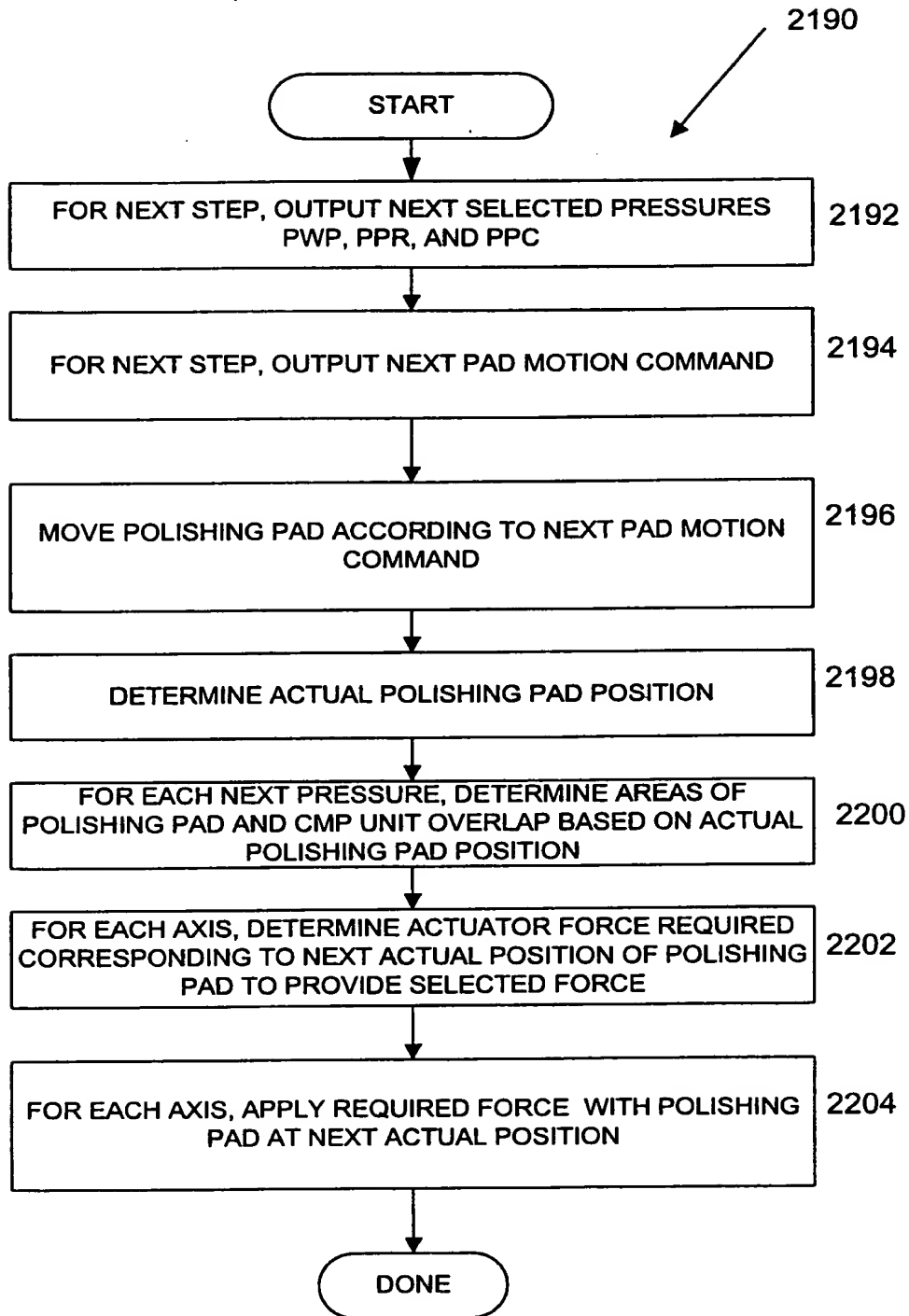


FIGURE 44

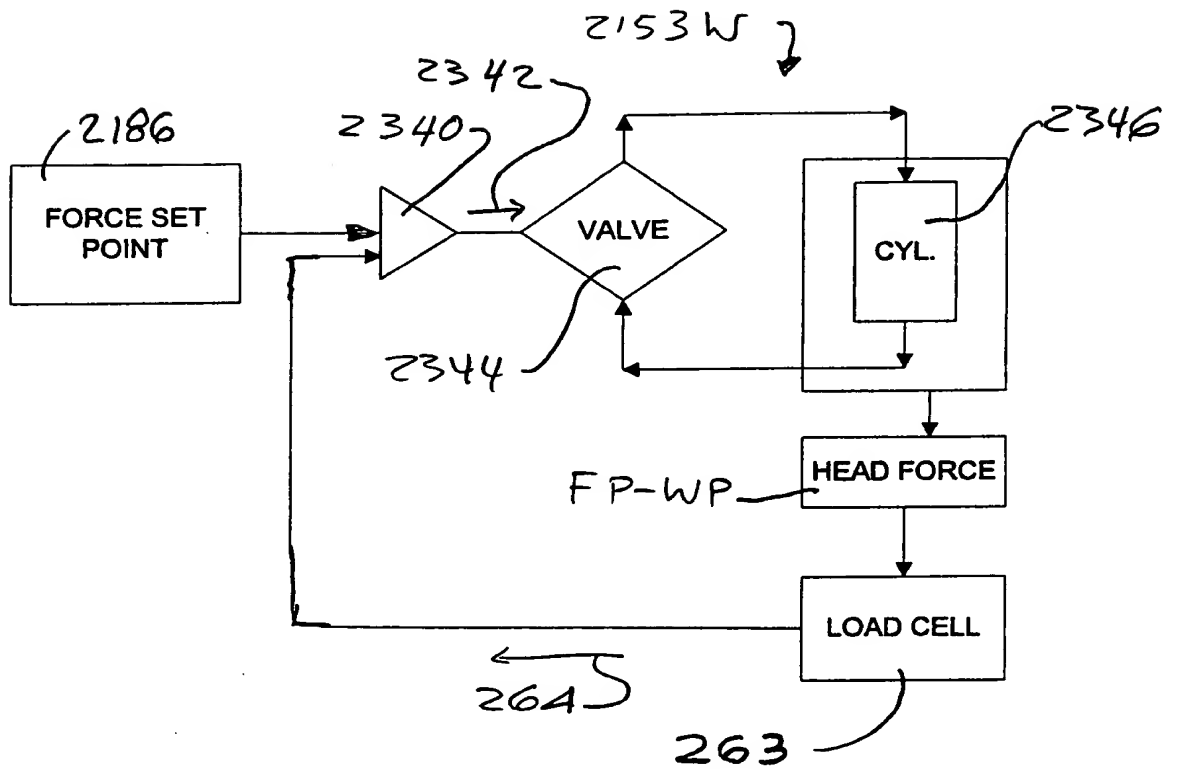


FIG. 45

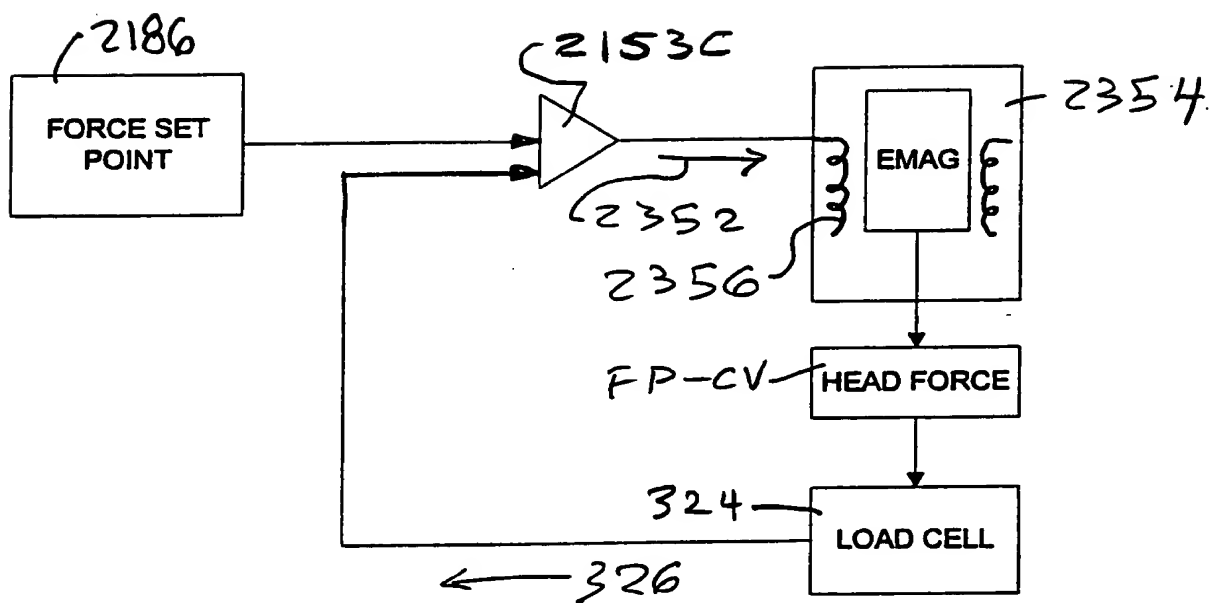


FIG. 46

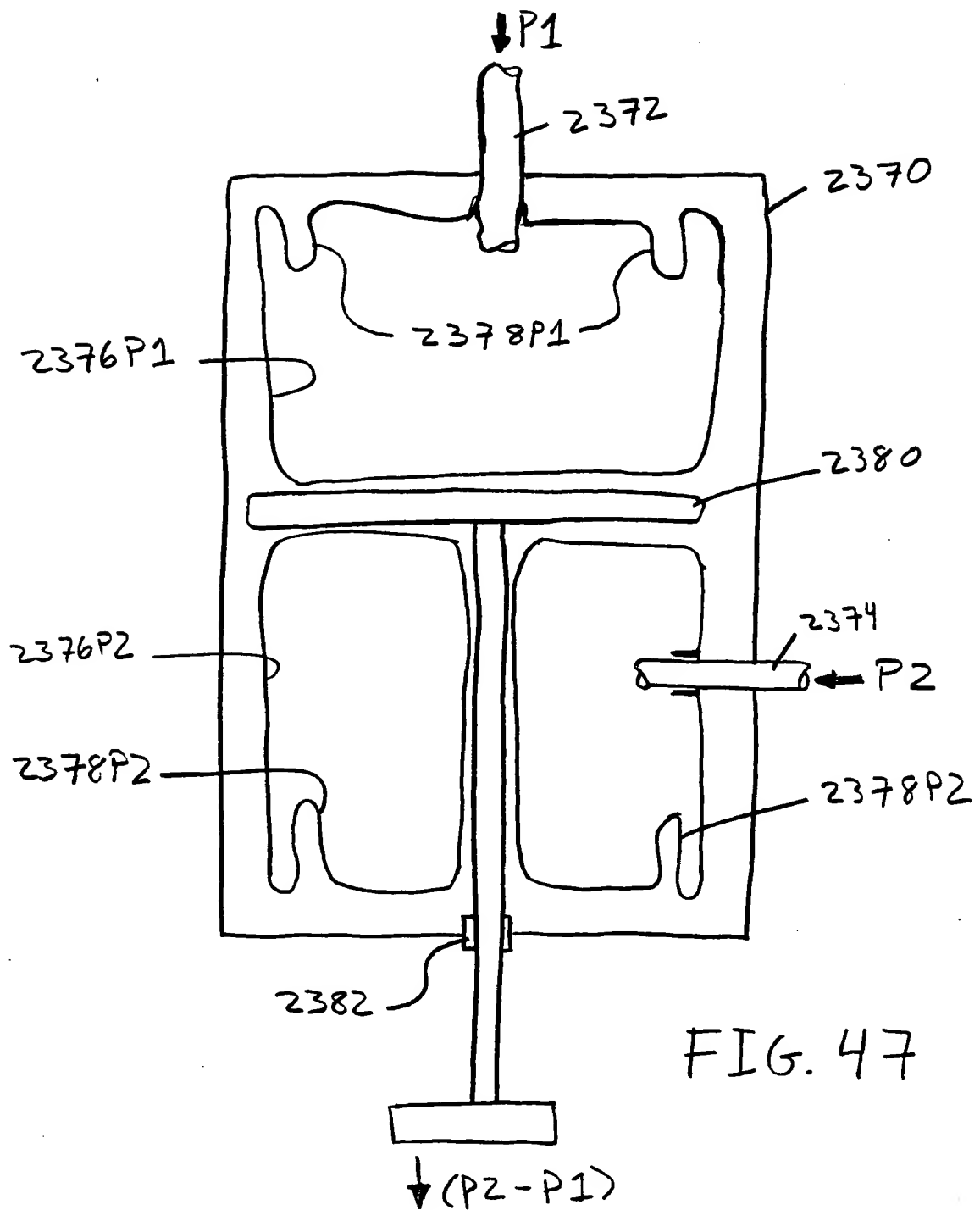


FIG. 47

FIG. 48

